

3rd Draft

ZONE 25

DRAFT LOCAL FACILITIES MANAGEMENT PLAN

City of Carlsbad

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August 20, 2012

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1. EXECUTIVE SUMMARY

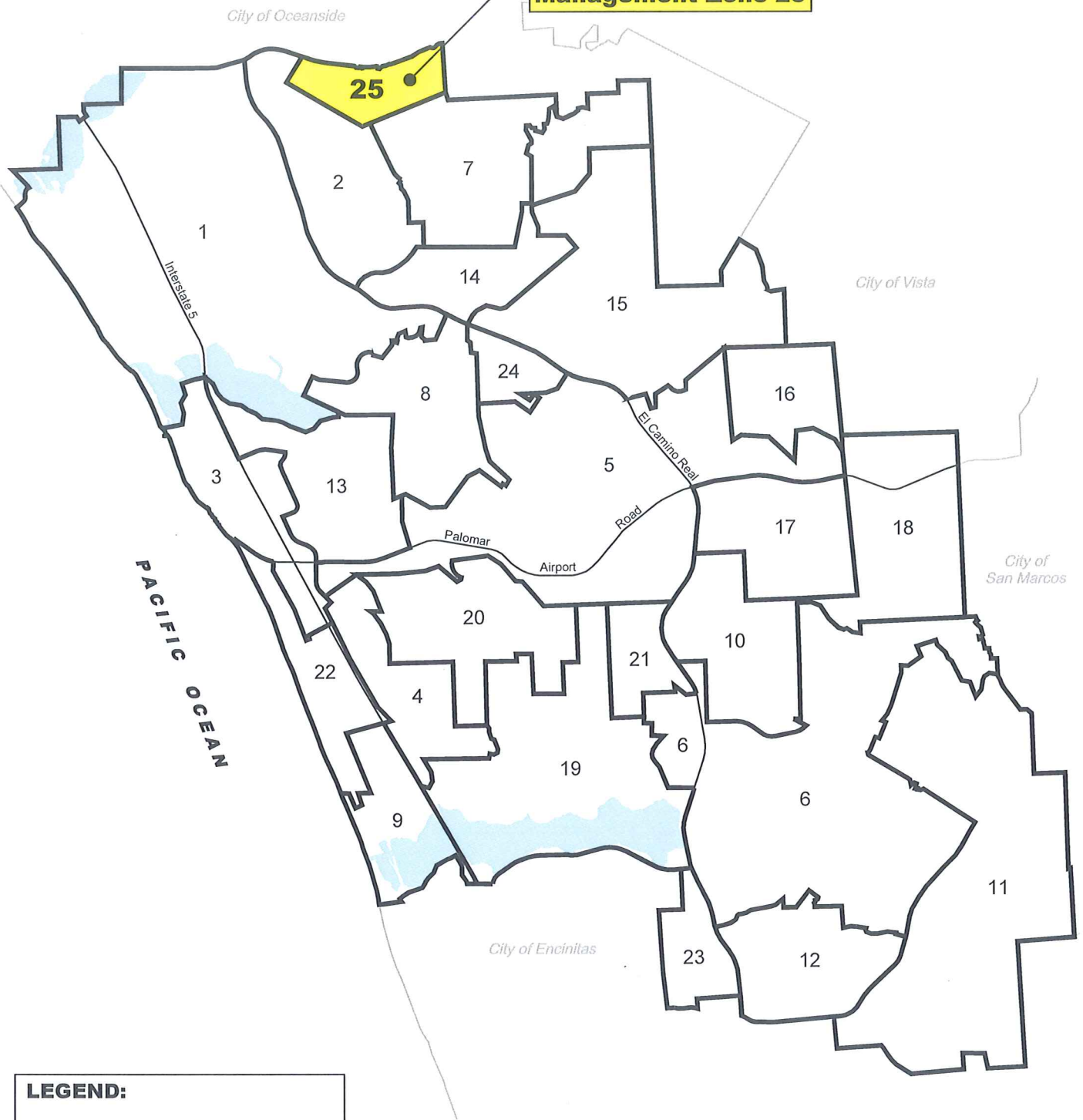
This Zone 25 Local Facilities Management Plan ("LFMP") is prepared to fulfill the requirements of the City of Carlsbad's Growth Management Program, in accordance with Chapter 21.90 of the Carlsbad Municipal Code ("CMC") and the corresponding Citywide Facilities and Improvements Plan ("CFIP") of 1986. This LFMP is intended to provide an analysis and establish a plan for supplying the public facilities that will be needed in order to accommodate development within the Zone 25 area of the City of Carlsbad through buildout of Carlsbad LFMP Zone 25. The location of Zone 25 within Carlsbad is shown on *Figure 1* on p. 2 of this LFMP document.

The Growth Management Program was adopted in 1986 with the intent to ensure that proposed development is not authorized unless it is demonstrated that adequate public facilities and improvements will be provided in a phased and logical fashion to adequately serve the growth associated with the proposed development. To this end, Growth Management policy dictates that a Local Facilities Management Plan ("LFMP") be prepared to analyze public facility demand of a proposed project (in conjunction with the demand of existing and other proposed and assumed projects), in relation to the anticipated supply of such public facilities.

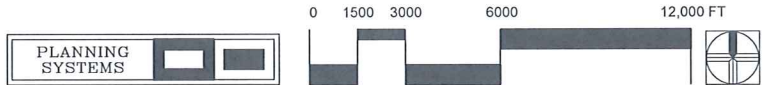
LFMP Zone 25 is approximately 292.93 acres in size. It is expected to build out as primarily open space, with sections of the eastern and middle portion of the zone containing pockets of high density and medium-high density residential land uses. The total number of buildout dwelling units is projected at 665 units. This total is achieved from total of the assumptions in the Draft Quarry Creek Master Plan – Hanson Aggregates property (656 du) and the units than can be achieved on the combined Caron properties (9 du). All other properties within the zone are designed for open space land use and no facility-demanding development is projected. No commercial or industrial development is assumed for the zone.

In accordance with the requirements of CMC 21.90.110, this LFMP analyzes public facility adequacy for three (3) community-wide facilities (City Administrative Facilities, Library Facilities and Wastewater Treatment Facilities), and eight (8) localized facilities (Parks, Drainage, Circulation, Fire Facilities, Open Space, Schools, Sewer Collection, and Water Distribution Facilities). Pursuant to CMC 21.90.090, minimum performance standards have been adopted for each facility. Development assumptions are made for all land within the LFMP Zone and an inventory of existing and future funded facilities is provided. A phasing schedule of present and future demand from the zone and resulting requirements for each facility is quantified and assessed against the adopted facilities performance standards. In the event that this analysis concludes that periods exist in which the demand for facilities and improvements exceeds the capacity or ability to comply with the performance standard, then no development shall occur unless a time schedule for and a means of increasing the capacity is established in the plan.

**Local Facilities
Management Zone 25**



LEGEND:
 — LFMP Boundary Lines



LOCATION MAP

LFMP - Zone 25

FIGURE 1

1.1 SUMMARY OF FACILITY ADEQUACY FINDINGS

As a result of the fact that Zone 25 is presently developed with only one residence, the projected buildout of the zone is the basis for determining adequacy of public facilities in this LFMP. The proposed phasing for development in the zone will determine the rate at which these public facilities will need to be provided. This analysis and the adequacy conclusions are provided in this LFMP document. A summary of the findings are as follows:

City Administrative Facilities

Existing and planned facilities will comply with the adopted performance standards through buildout of the zone as a result of funding through annexation of any developable property within the zone and payment of the necessary levies into the Citywide Community Facilities District (CFD No. 1).

Library

Existing and planned facilities will comply with the adopted performance standards through buildout of the zone as a result of funding through annexation of any developable property within the zone and payment of the necessary levies into the Citywide Community Facilities District (CFD No. 1).

Wastewater Treatment Capacity

Existing and planned facilities will comply with the adopted performance standards through buildout of the city of Carlsbad.

Parks

Park District 2 will comply with the adopted performance standard with the identified mitigation measures through the buildout of Zone 25 of the zone in accordance with the CIP funding and the payment of park-in-lieu fees by residential developers within Zone 25.

Drainage

Drainage facilities within and downstream from the Zone 25 Buena Vista Creek Drainage Basin will comply with the adopted performance standard with the identified drainage improvement mitigation measures through buildout. Any development within the zone will be required to provide Source Control Best Management Practices ("BMPs"), Site Design BMPs, Treatment Control BMPs, and to provide Hydromodification facilities in accordance with the City of Carlsbad Standard Urban Storm Water Management Plan (SUSMP) and the Final Hydromodification Management Plan. Construction of drainage facilities is required of developers within Zone 25 and will be addressed in the conditions of approval of project development permits.

Circulation

This LFMP assumes elimination of the Marron Road (and thus the Rancho Del Oro extension) link between Zone 25 and El Camino Real. Construction and/or funding of circulation facilities is required and will be addressed in the conditions of approval of project

development permits. Circulation facilities will comply with the adopted performance standard with the identified traffic circulation mitigation measures through buildout.

Fire

Zone 25 within the 5-minute response time of City of Oceanside Fire Station No. 4, located at the intersection of Thunder Drive and Lake Drive in Oceanside. This station is approximately 0.8 mile from the Quarry Creek site. The Cities of Oceanside and Carlsbad have a joint response agreement which dictates that the manned station which is closest (can provide the fastest response) to the subject emergency, shall respond. Thus the existing and planned facilities will comply with the adopted performance standards through buildout.

Open Space

Approximately 140.1 acres (50.6%) of Zone 25 qualifies as unconstrained open space and thus the zone will comply with the adopted performance standard throughout buildout of the zone. Endowment or other financial guarantee for management of natural, conserved open spaces is required pursuant to the Carlsbad Habitat Management Plan ("HMP").

Schools

Zone 25 is located within the Carlsbad Unified School District ("CUSD"). A Community Facilities District ("CFD") No. 3 special funding mechanism is in place and residential property is required to annex into this district. Compliance with this annexation requirement will ensure that school facilities will comply with the adopted performance standard through buildout.

Sewer Collection

Sewer Collection facilities have been sized and phased to serve anticipated buildout demand within the zone and thus will comply with the adopted performance standard with the identified mitigation measures through buildout.

Water Distribution

Water Distribution facilities have been sized and phased to serve anticipated buildout demand within the zone and thus will comply with the adopted performance standard with the identified mitigation measures through buildout.

1.2 GENERAL CONDITIONS FOR ZONE 25

The following conditions will need to be met in order to ensure that the necessary public facilities are provided to comply with the adopted performance standards.

1. All development within Zone 25 shall conform to the provisions of Section 21.90 of the Carlsbad Municipal Code and to the provisions and conditions of this Local Facilities Management Plan.
2. All development within Zone 25 shall be required to pay a Public Facilities Fee pursuant to the standards adopted by the City Council on July 28, 1987, and as amended from time to time and all other applicable fees. Development in Zone 25 shall also be responsible

for any additional fees to be incorporated into this plan that are found to be necessary to enable facilities to meet the adopted performance standard.

3. The City of Carlsbad shall monitor all facilities in Zone 25 pursuant to Subsections 21.90.130(c), (d) and (e) of the Carlsbad Municipal Code.
4. All development in Zone 25 shall be in conformance with the adopted Citywide Facilities and Improvements Plan as adopted by City Council Resolution 8797 on September 23, 1986, and amended on January 9, 1990, and in conformance with future amendments as described in Condition 5 below.
5. An amendment to the Zone 25 Local Facilities Management Plan will be necessary if development conditions change or as may be determined through the required monitoring program. Amendment to this Plan may be initiated by action of the Planning Commission, City Council, or property owners.
6. If a public facility or service is found not to be in conformance with an adopted performance standard during the yearly monitoring, or at any other time, and a financial guarantee pursuant to the Growth Management Program for the facility is not in place, the matter will be immediately brought before the City Council. If the City Council determines that non-conformance exists, then no further building permits or development permits shall be issued until an amendment to the Citywide Facilities Improvement Plan (CFIP) or the LFMP for Zone 25 is approved by the City Council or the deficiency is otherwise satisfied pursuant to the Growth Management Plan. This amendment shall address any facility shortfalls and bring those facilities into conformance with the adopted performance standards.
7. After adoption of this LFMP by the City Council, building permits will be allowed as long as facilities are in conformance with the adopted performance standards.
8. Approval of the Zone 25 LFMP does not constitute prior environmental review for projects within Zone 25. All future projects within Zone 25 shall undergo environmental review per Title 19 of the Carlsbad Municipal Code. Any mitigation measures determined during a project's environmental review must be complied with unless findings of overriding consideration are made by the City Council.
9. Approval of this Plan does not constitute prior discretionary review for projects within Zone 25. All future projects within Zone 25 shall undergo review per Title 21 of the Carlsbad Municipal Code. The plan establishes the maximum allowable number of residential units for facilities planning purposes only. The plan does not guarantee any specific residential density.
10. Approval of any discretionary permit within Zone 25 shall be contingent upon the provision of adequate public facilities to satisfy the Public Facilities Element of the General Plan. At this time, a Community Facilities District has been formed to finance the construction of several citywide facilities necessary to serve new development. Zone 25 properties subject to future development will be enrolled as participants of the CFD.

1.3 SPECIAL CONDITIONS FOR ZONE 25

The following Special Conditions apply specifically to development in Zone 25 and must be complied with in addition to the General Conditions for Zone 25 listed above. The Special Conditions are also listed separately under the analysis discussion of each facility.

1. City Administrative Facilities

No special conditions.

2. Library

No special conditions.

3. Wastewater Treatment Capacity

Future development in Zone 25 will be required to pay the sewer connection fee with each building permit.

4. Parks

- a. All residential development within Zone 25 shall pay park in-lieu fees.
- b. If at any time Zone 25 is found by the City Council to not be in compliance with the parks performance standard, no further residential development will be allowed in Park District 2 or Zone 25 unless actions have been taken by the City to guarantee additional park facilities, such as funding of Veteran's Memorial Park or other special use areas within five years.

5. Drainage

- a. All future development in Zone 25 may be required to construct necessary future Zone 25 storm drain facilities identified in the Drainage Master Plan as determined by the City Engineer. Any facilities necessary to accommodate an individual phase of future development must be guaranteed or provided for prior to the recordation of any final map, issuance of a grading permit or building permit, whichever occurs first, for any development phase requiring storm drain facilities in Zone 25.
- b. Prior to the recordation of any final map, issuance of any grading permit or building permit, whichever occurs first for any specific subdrainage area within Zone 25, the developers of that project are required to pay City of Carlsbad drainage fees. Notwithstanding that amendments to the Land Use Element of the Carlsbad General Plan are anticipated on the Quarry Creek property, drainage fees on this property will be based upon the Low-Medium Residential (RLM) and Open Space (OS) land use designations, inasmuch as those are the designations assumed in the Carlsbad Drainage Master Plan, upon which the overall drainage fee calculations and assumptions have been based. Also, in the event that a developer in Zone 25 installs drainage improvements which are assumed for funding through the PLDA Fee program, the developer may enter into a reimbursement agreement with the City for repayment of funds expended on PLDA improvements.

- c. Prior to the recordation of any final map, issuance of a grading permit or building permit, whichever occurs first for any project within Zone 25, the developers of that project are required to financially guarantee the construction of the storm drainage facilities that are determined by the City Engineer to be affected by the development and required for that phase of development that is proceeding.

6. Circulation

- a. All on-site circulation roadways serving properties within Zone 25 shall be designed, security posted and constructed as required by the City of Carlsbad.
- b. An ongoing monitoring program will evaluate the aspects of improvements, development, and demand on circulation facilities. The required timing of improvements is based upon the projected demand of development in the zone and the surrounding region. This timing may be modified without amendment to this plan; however, any deletions or additions to the improvements will require amending this local plan.

7. Fire Facilities

No special conditions.

8. Open Space

A management program, including property owner endowment for funding as may be required by the Carlsbad HMP is required for applicable open space conservation areas within Zone 25.

9. School Facilities

- a. Confirm with Carlsbad Unified School District compliance with the adopted school performance standard as a prerequisite of any development within the zone. All development within Zone 25 will be conditioned in accordance with the requirements of the State of California and the CUSD.
- b. The Quarry Creek development on the Hanson Aggregates property has been annexed into CUSD CFD #3 which provides the funding mechanism for payment of school mitigation costs and thus conformance with the adopted school performance standard and requirements of the State of California and CUSD. As other properties develop, it will necessitate their annexation into CFD #3 also.

10. Sewer Facilities

- a. All development within Zone 25 will be required to pay the appropriate Sewer Connection Fees prior to issuance of any building permits for such development. Funds expended by developers on installation of regional sewer facilities identified in the Sewer Master Plan shall be reimbursed to the developer. Such reimbursement may be through the offsetting of fees.
- b. Development of the Quarry Creek project on the Hanson Aggregates property shall provide a gravity sewer connection to the southern boundary of Zone 25 at a location

acceptable to the City Engineer in order that the Simsbury Sewer Lift Station can be abandoned by the City.

- c. Development of the Quarry Creek project on the Hanson Aggregates property shall provide a gravity sewer stub connection to the eastern boundary of Zone 25 at the terminus of Marron Road so that in the future the Quarry Creek Shopping Center's sewer lift station can be connected and the private sewer lift station can be abandoned.

11. Water Facilities

- a. Water facilities will be provided by the developer(s) of projects within Zone 25 concurrent with Zone 25 development to the satisfaction of CMWD.
- b. All future development in Zone 25 shall pay a major facilities fee based on water meter size to CMWD and any capacity charge levied by the San Diego County Water Authority for domestic water meters.

2. INTRODUCTION

This LFMP document constitutes the document required to comply with the City's ordinance to ensure compliance with the adopted performance standards throughout buildout of Zone 25. Zone 25 encompasses approximately 292.93 acres located at the northern boundary of the city of Carlsbad. Seven (7) different land parcels exist within the Zone, under three different ownerships. These parcels and ownerships are shown on *Figure 2*, and indicated on *Table 1* below:

Table 1: Zone 25 Parcels and Ownership

Assessor's Parcel Number	Owner	Acreage
167-040-21-00	Hanson Aggregates Pacific Southwest Inc.	100.13
167-040-11-00	Hanson Aggregates Pacific Southwest Inc.	55.25
167-040-39-00	State of California Department Fish & Game	112.59
167-040-38-00	State of California Department Fish & Game	21.23
067-040-31-00	Shelley H. Caron Trust 07-13-06	3.06
167-040-35-00	Shelley H. Caron Trust 07-13-06	0.41
167-040-34-00	Shelley H. Caron Trust 07-13-06	0.26
TOTAL		292.93

The zone is undeveloped except for the Caron single family home located on APN 167-040-31-00. The adjacent Hansen Aggregates concrete plant on APN 167-040-21-00 is no longer in operation and the quarry land is presently being reclaimed for its ultimate land use. No other development exists within the zone.

2.1 PERFORMANCE STANDARDS

The adopted performance standards for the public facilities addressed in this LFMP are as follows:

City Administrative Facilities. 1,500 square feet per 1,000 population must be scheduled for construction within a five-year period or prior to construction of 6,250 dwelling units, beginning at the time the need is first identified.

Library. 800 square feet (of library space) per 1,000 population must be scheduled for construction within a five year period or prior to construction of 6,250 dwelling units, beginning at the time the need is first identified.

Wastewater Treatment Capacity. Sewer plant capacity is adequate for at least a five-year period.

Parks. Three acres of community park or special use area per 1,000 population within the Park District must be scheduled for construction within a five-year period, or prior to construction of 1,562 dwelling units within the Park District beginning at the time the need is first identified.

Drainage. Drainage facilities must be provided as required by the City concurrent with development.

Circulation. No road segment or intersection in the zone nor any road segment or intersection out of the zone which is impacted by development in the zone shall be projected to exceed a service level C during off-peak hours, nor service level D during peak hours. Impacted means where 20 percent or more of the traffic generated by the Local Facility Management Zone will use the road segment or intersection.

Fire. The number of dwelling units outside a five-minute "travel time" from the nearest fire station shall not exceed 1,500 units.

Open Space. Fifteen percent of the total land area in the LFMP zone, exclusive of environmentally constrained non-developable land, must be set aside for permanent open space and must be available concurrent with development.

Schools. School capacity to meet the projected enrollment within the LFMP zone as determined by the appropriate school district must be provided prior to projected occupancy.

Sewer Collection System. Trunk line capacity must meet sewer demand, as determined by the appropriate sewer districts, and must be provided concurrent with development.

Water Distribution System. Line capacity to meet demand, as determined by the appropriate water district, must be provided concurrent with development. A minimum 10-day average storage capacity must be provided prior to development.

2.2 CURRENT STATUS OF PUBLIC FACILITIES

The development assumptions outlined above are used to estimate the demand for public facilities generated by development in Zone 25 based on the eleven adopted performance standards in the Growth Management Program. *Table 2* shows the current status of each facility with respect to the performance standards based on existing development within the Zone. Due to the fact that there is currently no developed land in Zone 25 (with the exception of the existing single family home), public facility demands are negligible and, therefore, all eleven performance standards are considered currently in compliance.

Based on assumed uses/densities and phasing, this Plan specifies General and Special conditions in order to ensure compliance with City adopted performance standards. The General Conditions are applicable to all zones of the city, while the Special Conditions are specific to only Zone 25. The Special Conditions identify each facility which must be provided, whether it must be financed or constructed, and at what time it must be provided.

Table 2: Zone 25 Existing Public Facilities Summary Sheet

Facility	Compliance with Adopted Performance Standard
City Administrative	Yes; Existing facilities comply with the adopted performance standard
Library	Yes; Existing facilities comply with the adopted performance standard
Wastewater Treatment Capacity	Yes; Existing facilities comply with the adopted performance standard
Parks	Yes; Park District 2 complies with the adopted performance standard.
Drainage	Yes; Existing drainage facilities comply with the adopted performance standard
Circulation	Yes; Existing circulation facilities comply with the adopted performance standard
Fire	Yes; Existing fire facilities comply with the adopted performance standard
Open Space	Yes; Existing open space areas comply with the adopted performance standard
Schools	Yes; Existing school facilities comply with the adopted performance standard
Sewer Collection	Yes; Existing sewer collection facilities comply with the adopted standard
Water Distribution	Yes; Existing water distribution facilities comply with the adopted standard

2.3 ZONE 25 OVERVIEW

LFMP Zone 25 is located in the northeast quadrant of the city of Carlsbad and totals approximately 294.34 acres of land, virtually all of which is vacant of development at this time. The zone borders land which is within the city of Oceanside to the north and east, El Camino Real and Zone 2 to the west, and Calavera Hills and Zone 7 to the South. Existing General Plan land uses over the zone are Residential Low-Medium Density, Travel Recreation Commercial, Office and Open Space. The westerly section of Zone 25 is owned by the State of California (Buena Vista Creek Valley property) and is overlain by an open space biological resource conservation easement.

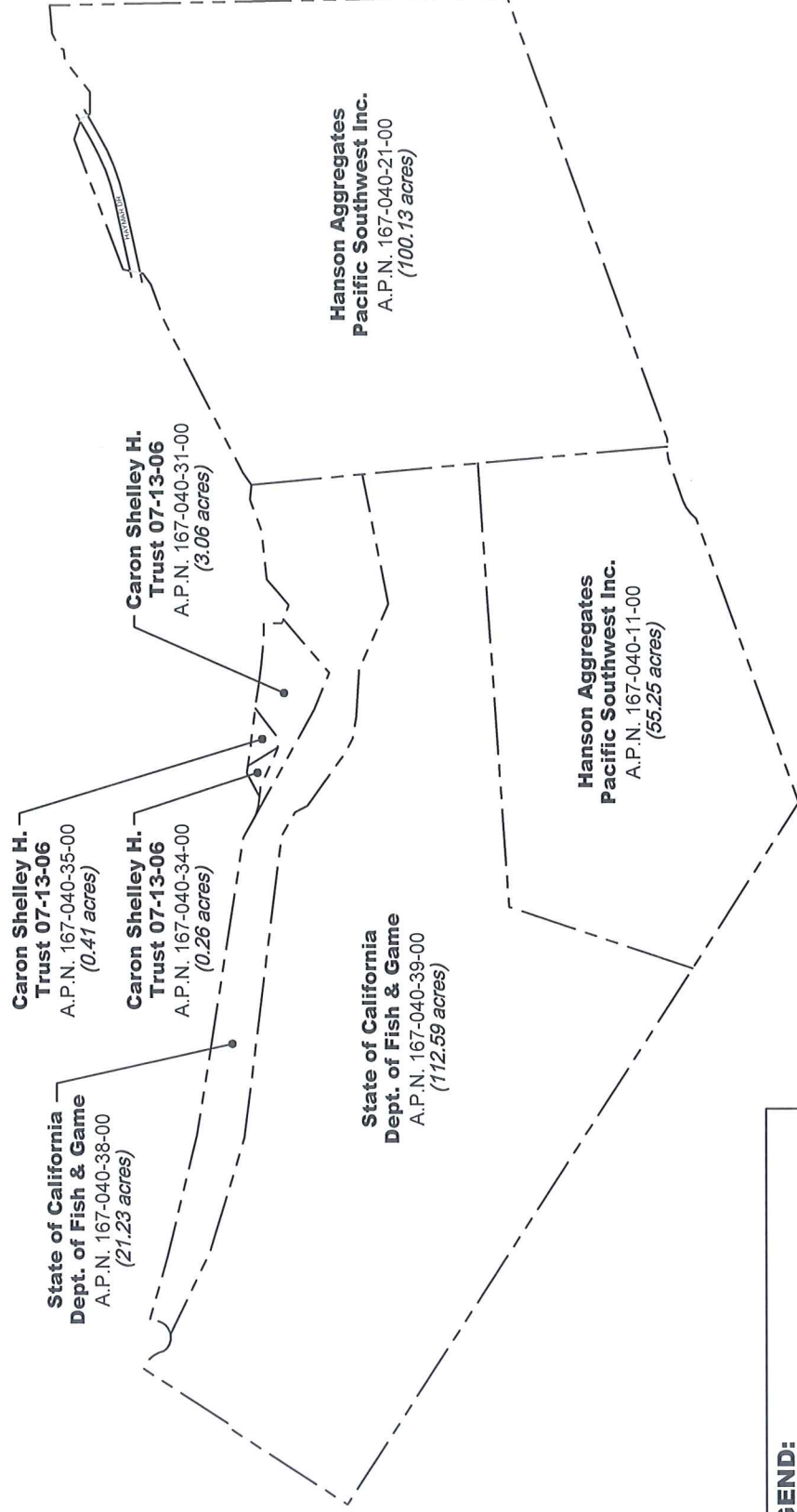
The existing Land Use Map as indicated in the Land Use Element of the General Plan applicable to Zone 25 is shown on *Figure 3*. The land uses analyzed in this LFMP are shown on *Figure 4*. The *Figure 4* assumed land uses differ from the current General Plan for two reasons; (1) the State of California parcels have been encumbered with an open space conservation easement and thus are assumed an open space buildout land use, and (2) the Hansen Aggregates (Quarry Creek) Parcel 167-040-21-00 has been the subject of an amendment to the Carlsbad Housing Element to require residential high and medium-high density land uses, and thus the assumed uses reflect this action. A General Plan Amendment to the Land Use Element to provide consistency between the General Plan elements is presently in process in conjunction with the Master Plan for the Quarry Creek project.

The assumptions utilized in this LFMP are for public facility planning purposes only. The internal distribution of all planning area acreages and unit counts are subject to change as the development entitlement process proceeds.

The existing zoning of the property within Zone 25 is shown on *Figure 5*.

2.4 PHASING OF DEVELOPMENT FOR ZONE 25

This Plan includes estimated phasing schedules, which indicate the current best estimate of the amount of development anticipated for each year from 2013 (the year that development of Zone 25 is projected to provide first housing occupancies) to 2017 (the year that development of Zone 25 is projected to be built out). The phasing estimates are intended for facility planning purposes only. The phasing schedule also includes the adopted projections for the other Zones which have adopted Local Facilities Management Plans. These adopted projections are added to demand calculations to determine approximate threshold years for constructing or upgrading various public facilities to maintain compliance with the performance standards adopted in the Growth Management Program. The threshold years arrived at in this way are only projections for facility planning purposes. The actual thresholds will be monitored by the City as development occurs in this zone. Public facilities may be needed earlier or later than the threshold years shown in this zone plan, depending upon the actual timing of development.



LEGEND:
 --- Parcel Ownership Boundary

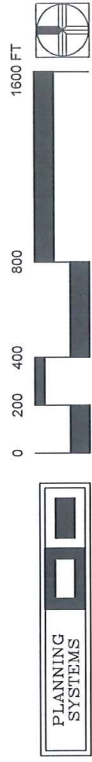
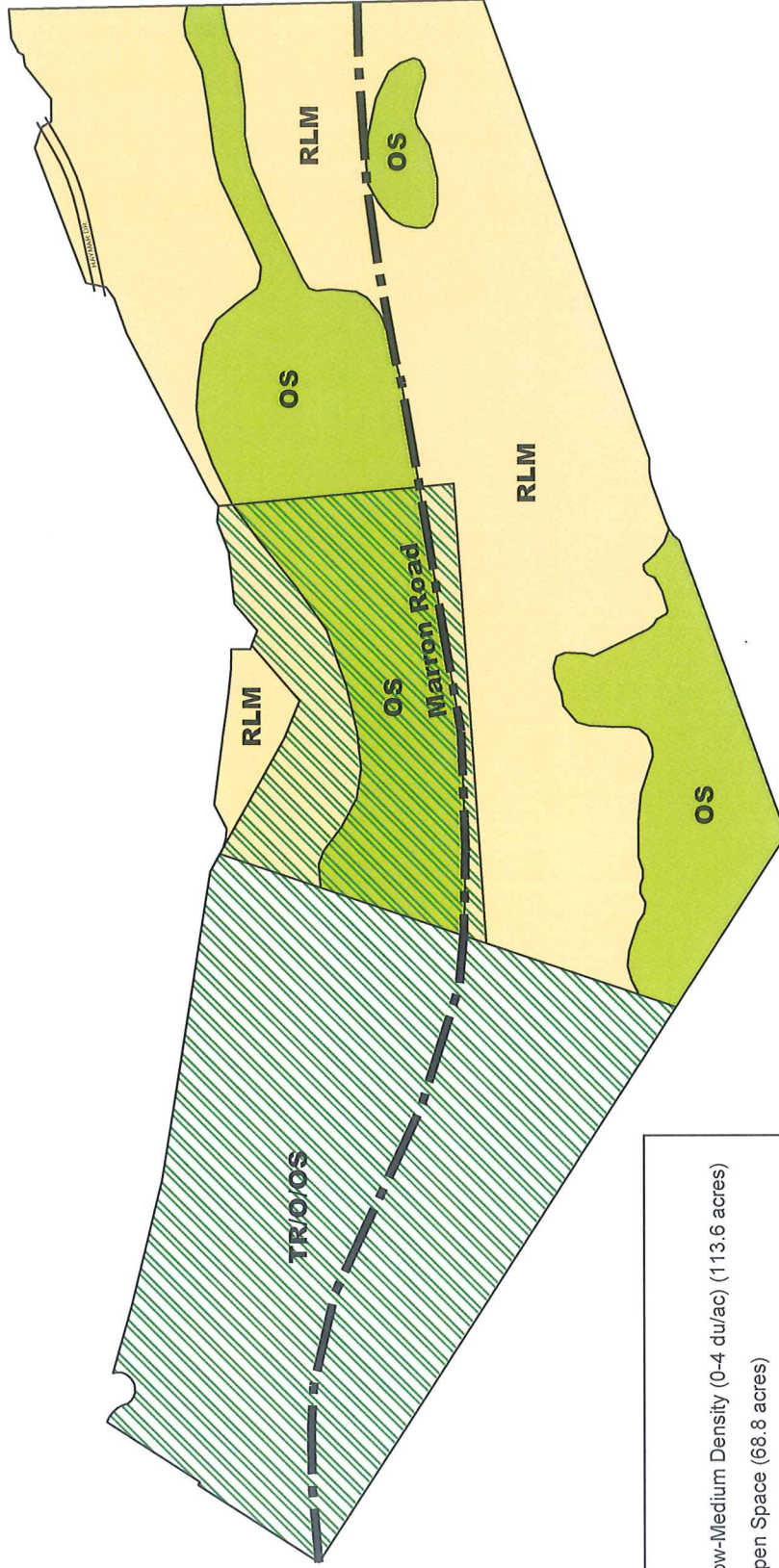


FIGURE 2

OWNERSHIP



LEGEND:

- RLM** Low-Medium Density (0-4 du/ac) (113.6 acres)
- OS** Open Space (68.8 acres)
- TR/O/OS** Buena Vista Ecological Reserve* (110.5 acres)
- Multiple Designations**
 - (TR) Travel/Recreation Commercial
 - (O) Office & Related Commercial
 - (OS) Open Space
- Secondary Arterial Road**

* State of California Dept. of Fish & Game owned property with approved open space easement; that has not had land use designation updated on the City of Carlsbad General Plan Land Use Map.

Source:
City of Carlsbad General Plan Land Use Map
(January 2011)

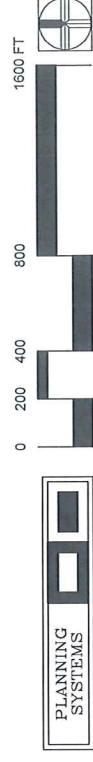
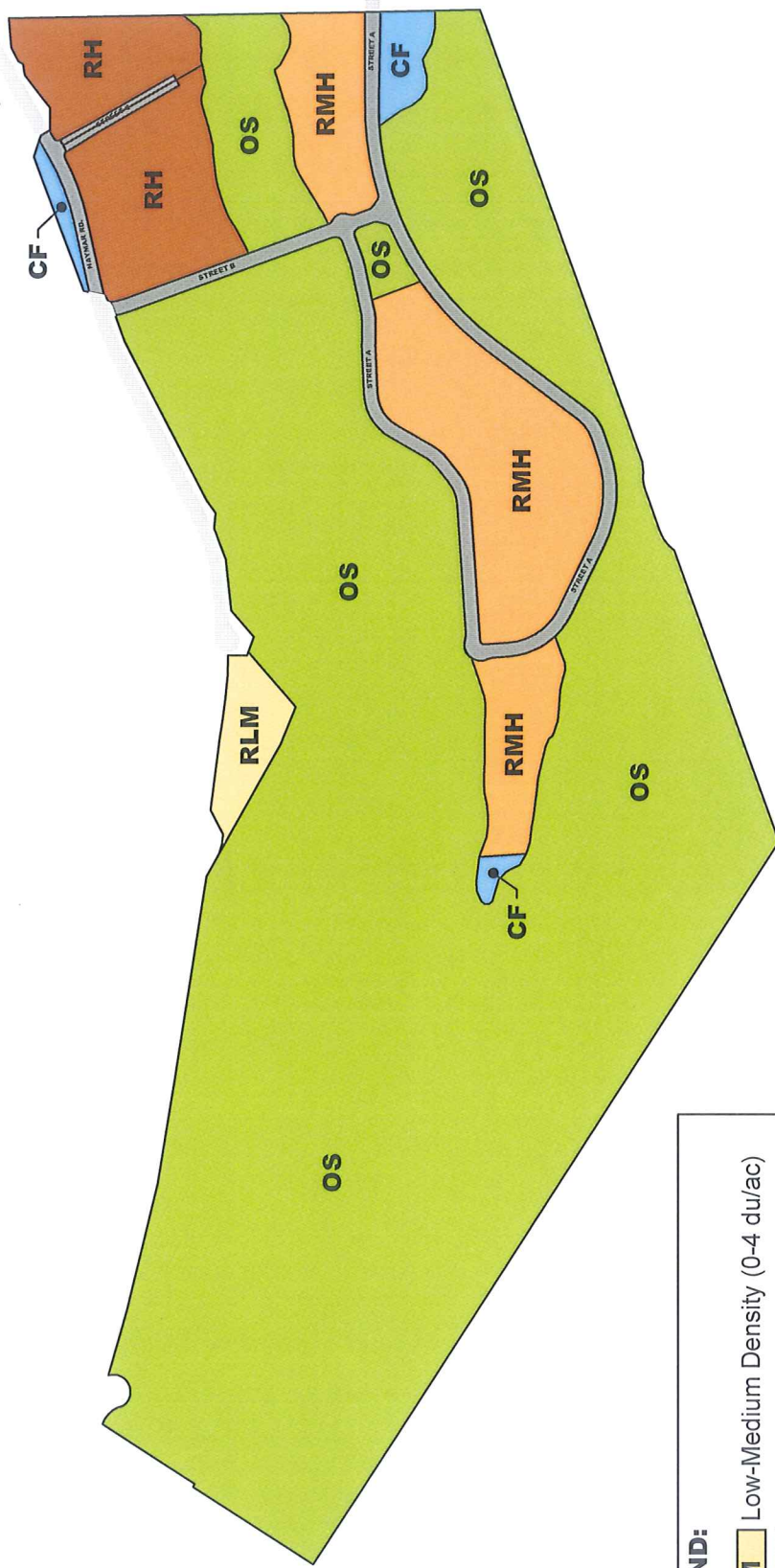


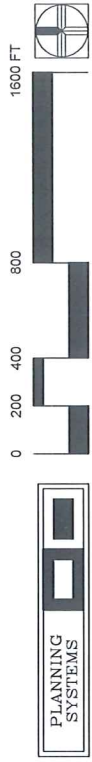
FIGURE 3

EXISTING GENERAL PLAN LAND USE MAP



LEGEND:

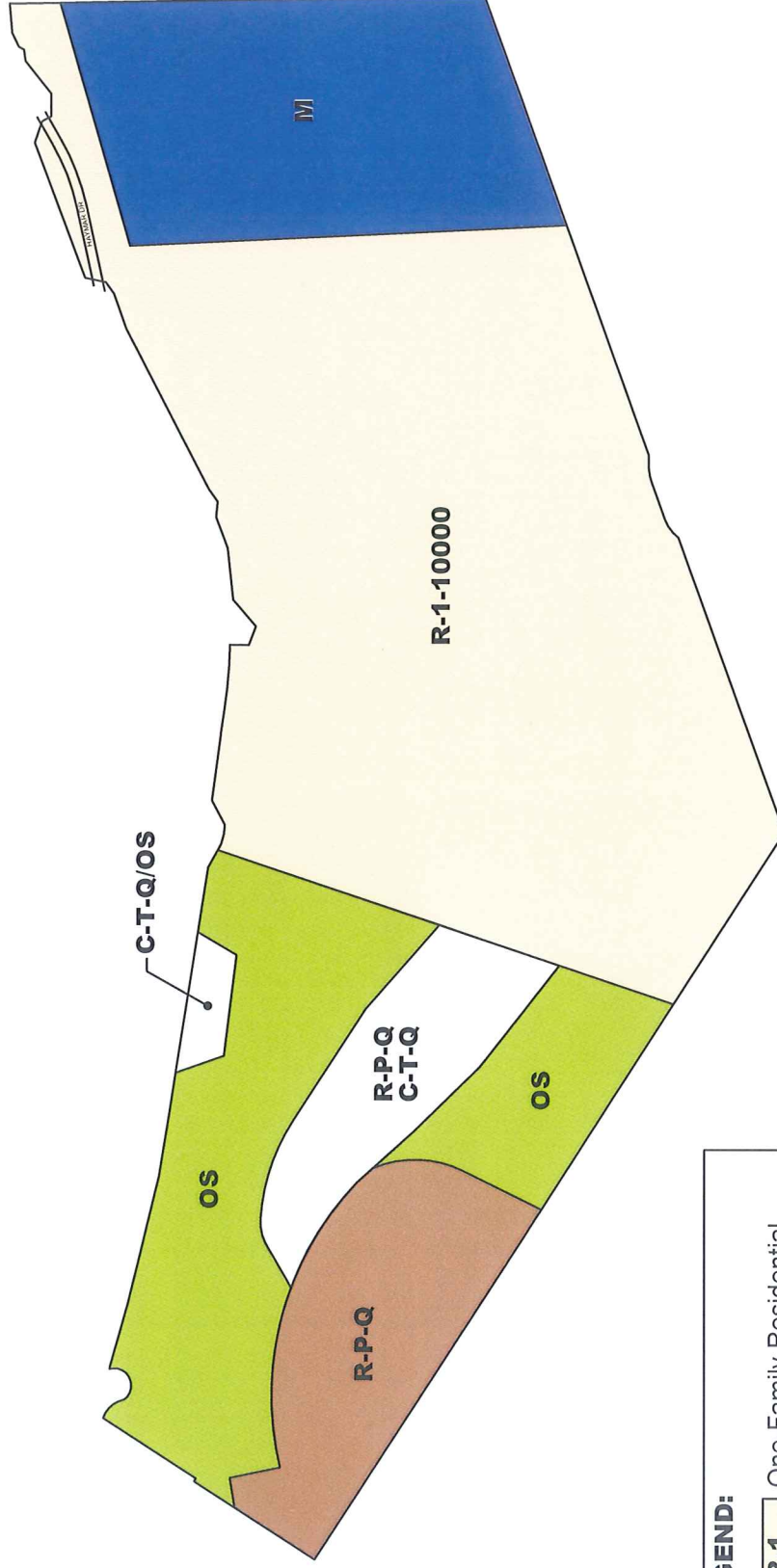
RLM	Low-Medium Density (0-4 du/ac)
RMH	Medium-High Density (8-15 du/ac)
RH	High Density (15-23 du/ac)
OS	Open Space
CF	Community Facilities



PROPOSED GENERAL PLAN LAND USE MAP

LFMP - Zone 25

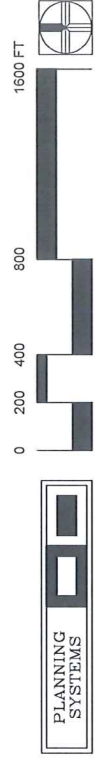
FIGURE 4



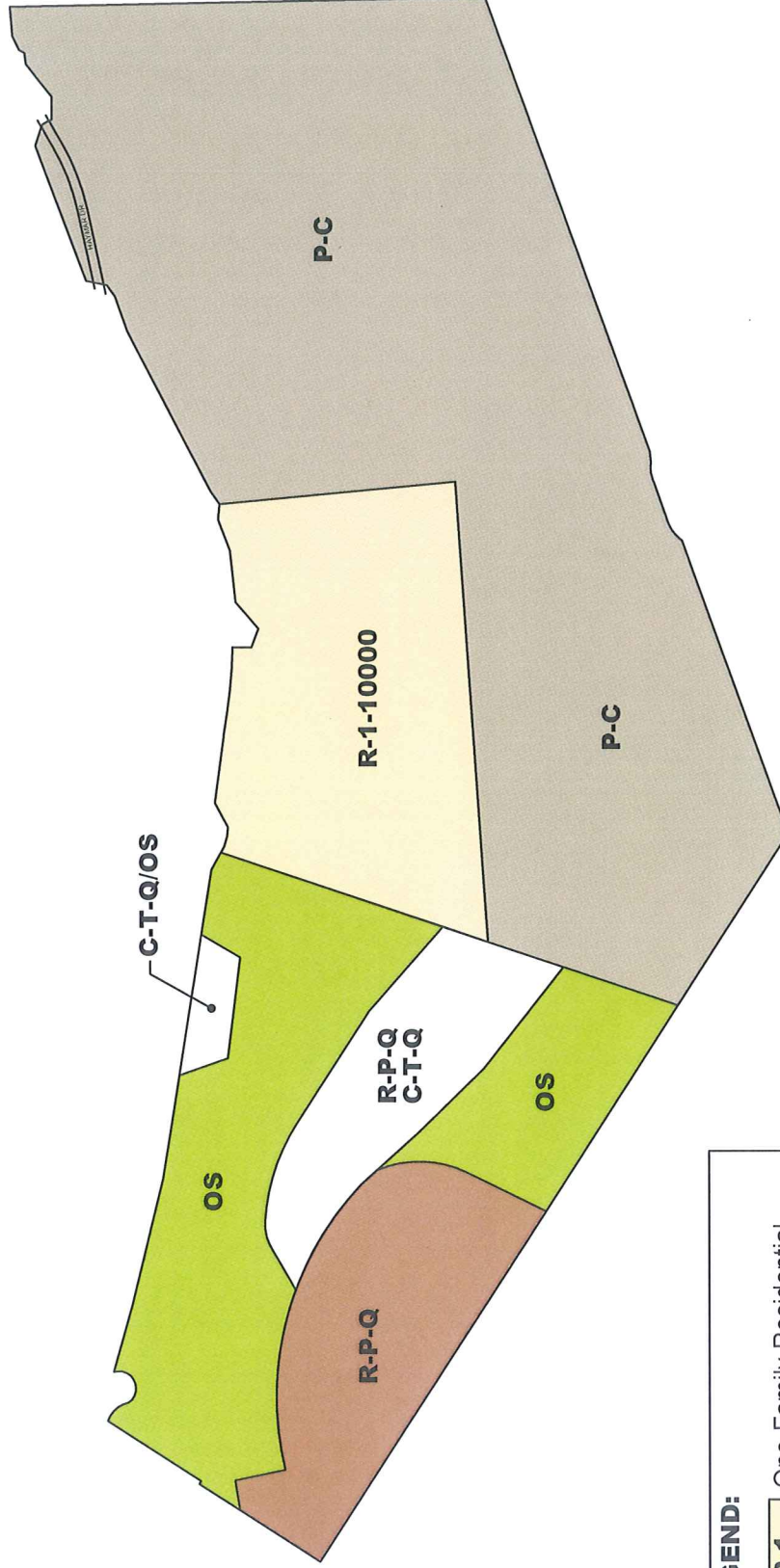
LEGEND:

R-1	One-Family Residential
R-P	Residential Professional
M	Industrial
OS	Open Space
	Multiple Designations
	(CT) Commercial Tourist

Source:
City of Carlsbad Zoning Map (January 2011)



EXISTING ZONING MAP



LEGEND:

R-1	One-Family Residential
R-P	Residential Professional
P-C	Industrial
OS	Open Space
	Multiple Designations (CT) Commercial Tourist

PROPOSED ZONING MAP

LFMP - Zone 25

3. BUILDOUT PROJECTIONS

Development assumptions and buildout projections used to estimate the demand for public facilities within the Zone define maximum potential land use intensity and corresponding maximum facility demands based on the adopted performance standards. The basis for the land uses and buildout projections in this Zone is the Carlsbad General Plan Land Use Map, as amended in connection with the Draft Quarry Creek Master Plan.

3.1 DEVELOPMENT ASSUMPTIONS FOR ZONE 25

This Zone 25 LFMP estimates the type and amount of development proposed within the Zone as proposed in the Quarry Creek Master Plan, and as anticipated for the Buena Vista Valley Preserve (owned by the State of California), and per the Carlsbad General Plan for the other minor properties within the Zone.

3.1.1 Existing Land Use Element Map

Residential density assumptions are governed by the Growth Management Control Points adopted in CMC 21.90.045; and as shown in *Table 3*.

Table 3: Adopted Residential Growth Control Points

General Plan Land Use	Density per Net Acre
Low density residential (RL)	1.0 du/acre
Low-medium density residential (RLM)	3.2 du/acre
Medium density residential (RM)	6.0 du/acre
Medium-high density residential (RMH)	12.0 du/acre
High density residential (RH)	20.0 du/acre

Pursuant to Section 21.53.230, net acreage of undeveloped residential land is determined through a calculation of gross acreage, minus the following constrained lands:

- Beaches
- Permanent bodies of water
- Floodways
- Natural slopes greater than 40 percent gradient
- Significant wetlands
- Riparian or woodland habitats
- Major power transmission easements
- Other significant environmental features
- Railroad track beds
- Slope areas of 25% to 40% inclination (1/2 density)
- Natural slopes of a 25 to 40 percent gradient (one-half density credit)

Areas identified as open space are assumed to have no development potential. Thus, based on the Draft Quarry Creek Master Plan and constraints mapping analysis, the Zone 25 buildout residential development capacity would allow a maximum of 293 dwelling units.

3.1.2 Adopted Housing Element

The existing Land Use Element designations on the Hanson Aggregates Reclamation property are presently in conflict with the December 23, 2009 adoption of the updated City of Carlsbad 2005-2010 General Plan Housing Element policies dictating modification of the land uses on the Reclamation Parcel to Residential-High and Residential-Medium-High densities. This adopted Housing Element dictates that in order for the City to ensure that adequate residential acreage is available to meet the City's Regional Housing Needs Assessment ("RHNA"), that the City will implement a General Plan Amendment to the Land Use Element to re-designate a minimum net acreage to accommodate at least 300 high density (≥ 20 du/ac) and 200 medium-high density (≥ 12 du/ac) housing units on the Quarry Creek Reclamation Parcel site. This action was followed-up by a redistribution of an additional 6 unit transfer from other property in Carlsbad to supplement the high and medium-high density units. Thus, existing adopted City housing policy for the Quarry Creek Reclamation parcel stipulates construction of a minimum of 506 residential units. Through adoption of these minimum densities, all of these 506 units qualify to satisfy the City's RHNA requirements for low and moderate affordable housing per State guidelines.

3.1.3 Residential Dwelling Unit Assumptions Zone 25

In light of the changes referenced above, the total number of buildout dwelling units in LFMP Zone 25 is projected at 665 units. This total is achieved from total of the assumptions in the Draft Quarry Creek Master Plan – Hanson Aggregates property (656 du) and the units than can be achieved on the combined Caron properties (9 du). This LFMP assumes the land uses and intensities proposed in that Master Plan. All other properties within the zone are designed for open space land use and no facility-demanding development is projected. No commercial or industrial development is assumed for the zone. The land use changes adopted in the Housing Element action, and those thus assumed in this LFMP would require a transfer of dwelling units from the City's Excess Dwelling Unit Bank pursuant to City Council Policy 43.

The buildout residential dwelling unit assumptions for Zone 25 are 665 units. According to the 2010 Federal Census, the average number of persons per household in Carlsbad is 2.349 persons. Therefore the buildout population projection for Zone 25 is determined to be 1,562 persons. Population counts are the basis for adequacy analysis of several of the public facilities analyzed. This buildout population projection is utilized consistently through this analysis for the purposes of predicting demand for the appropriate public facilities.

The total number of units ultimately constructed within Zone 25 may vary from the projections used in this plan. This factor will not necessitate an amendment to the plan if facility requirements are not significantly affected. Sources of variance include possible density bonuses for provision of affordable housing, as well as other undetermined factors.

3.1.4 Nonresidential Assumptions Zone 25

The Zone 25 plan assumes 179.3 acres of open space. No other nonresidential land uses are assumed within the zone.

3.1.5 Zone 25 Land Use Table

The following *Table 4* demonstrates the acreages of the assumed land uses used for this LFMP public facility demand analysis.

Table 4: Zone 25 Assumed Land Use Acreage Distribution

Land Use	Density	Acreage
Residential – High Density	Greater than 20 du/ac	18.2 Ac.
Residential – Medium-High Density	Greater than 12 du/ac	30.7 Ac.
Residential – Low-Medium Density	0-4 du/ac	3.7 Ac.
Community Facilities		3.6 Ac.
Open Space		227.1 Ac.
Roads		11.0 Ac.
TOTAL		294.3 Ac.

3.2 QUADRANT RESIDENTIAL DWELLING UNIT CAPS

The 1986 Growth Management Plan adopted residential dwelling unit limitations (or caps) for each respective quadrant of the city. Zone 25 is located within the Northeast Quadrant. The total number of dwelling units allowed within the Northeast Quadrant at City buildout is 9,042 units. Over the years, a number of residential development projects have been approved within the City at densities less than were projected per the Growth Management Quadrant caps and the City has deposited these and other unrealized (excess) units into the Excess Dwelling Unit Bank ("EDUB"). As of March 2012, 5,712 units have been constructed in the Northeast Quadrant. The remaining allowance is 3,300 units that could be constructed without exceeding the building figure.

4. PHASING

Phasing projections estimate when, where, and how much development will occur in Zone 25 between the present time and buildout of the Zone. Although difficult to predict with certainty, phasing projections contribute to the accuracy of advance planning and programming of public facilities to ensure that the Zone is continually in compliance with the adopted performance standards. The objectives of phasing projections are as follows:

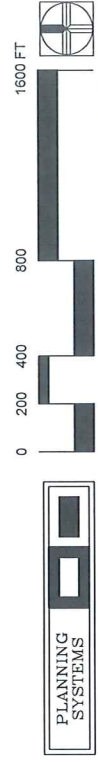
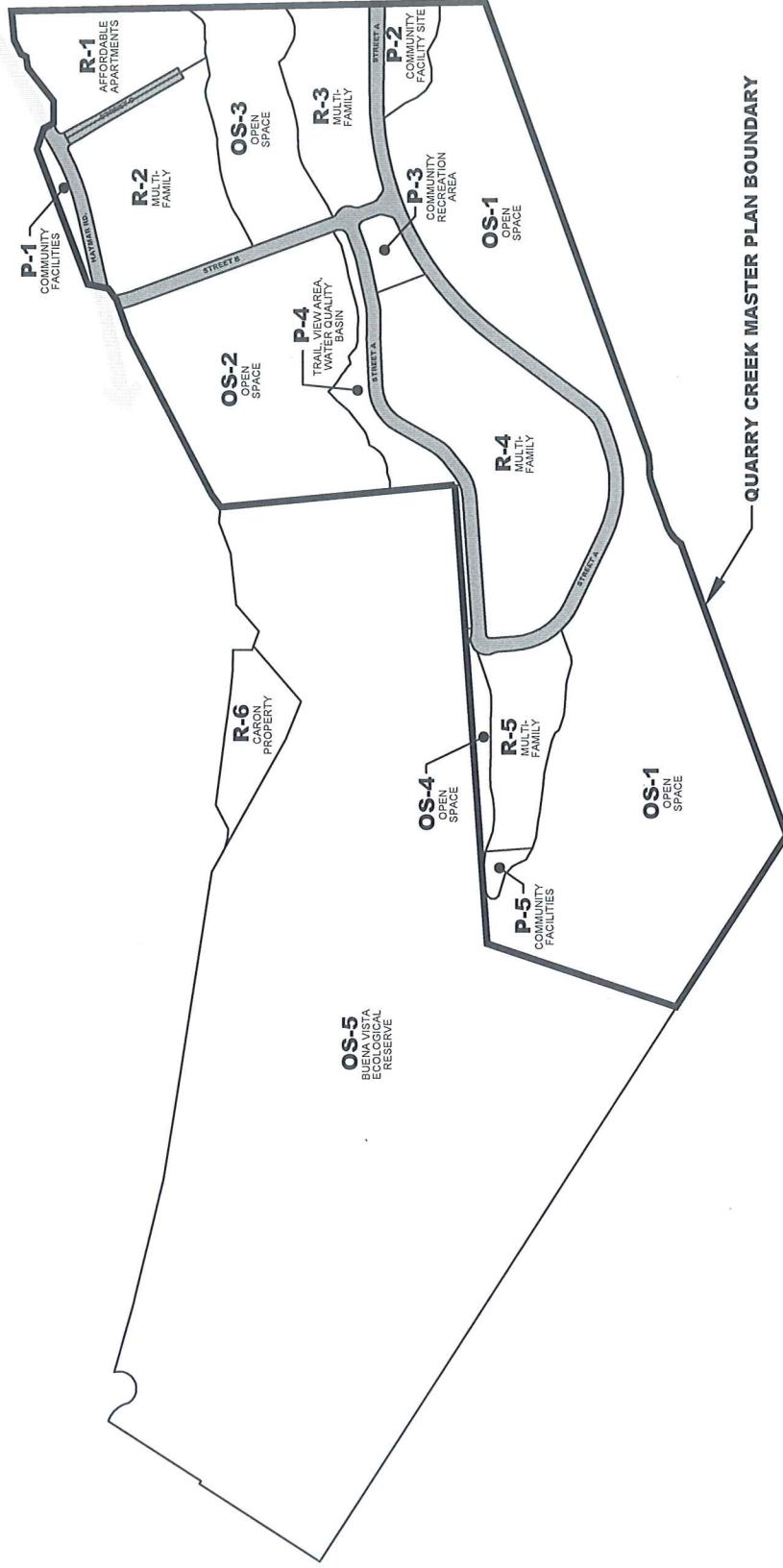
1. To project estimated demands for public facilities on a yearly basis until buildout.
2. To project and establish thresholds when and where public facility improvements will be needed prior to demand.
3. To allow sufficient lead-time for facility programming to ensure that the zone is continually in compliance with the performance standards.
4. To allow the City to efficiently and effectively implement public facility improvements.

4.1 ZONE 25 PHASING

The Citywide Facilities and Improvements Plan requires that LFMP analyses include annual phasing, projected to buildout of the zone, in order to anticipate the schedule of growth and demand for public facilities. To this end, Zone 25 has been broken down into geographical planning areas. The locations of these planning areas are shown on *Figure 7*. These projections are a tool to allow the City to anticipate future public facility needs and to budget funds for their improvement. The projected phasing schedule is not absolute. The actual amount of development to be constructed each year will vary depending upon economic and other external conditions.

4.1.1 Assumed Residential Phasing

Phasing projections are provided in order to plan for public facilities. This Zone 25 plan provides these projections in order to establish thresholds which will trigger the need for additional facilities, so that no facilities shortfall exists. The Growth Management Program and this Zone 25 plan anticipate that the actual phasing of development in this zone will vary from these projections. In no instance, however, will a change in phasing result in noncompliance with any public facility performance standard. The public facility thresholds established in this plan will ensure that compliance with the performance standards is maintained or no development will be allowed until compliance is again reached.



ZONE 25 PLANNING AREA MAP

LFMP - Zone 25

FIGURE 7

PAGE 22

The phasing of development involves assessment of adequacy for different geographical areas for different facilities. *Table 5* demonstrates the residential and population phasing schedule for Zone 25. *Table 6* shows the residential phasing schedule for the LFMP zones within the northeast quadrant of the city, including Zone 25. These projections are utilized to project and monitor the quadrant-specific facilities such as parks. *Table 7* demonstrates residential phasing of dwelling units and population growth for all LFMP's throughout the city. These projections are utilized to monitor citywide facilities, such a city administrative and library facilities.

Table 5: Zone 25 Buildout Residential Projections and Phasing

Year	G.P. Land Use	Planning Area	Product	DU	Population
2012	RLM	R-6	Single family	1	2.35
2013	RH	R-1	Multi-family	50	117.45
	RMH	R-3	Multi-family	25	58.72
	TOTAL			75	176.17
2014	RH	R-1	Multi-family	79	185.57
	RH	R-2	Multi-family	56	130.54
	RMH	R-3	Multi-family	25	58.73
	RMH	R-4	Multi-family	25	58.73
	RMH	R-5	Multi-family	25	58.73
	TOTAL			210	493.29
2015	RH	R-2	Multi-family	100	234.90
	RMH	R-4	Multi-family	75	176.17
	RMH	R-5	Multi-family	31	72.82
	TOTAL			206	483.89
2016	RH	R-2	Multi-family	77	180.87
	RMH	R-4	Multi-family	75	176.16
	TOTAL			152	357.04
	RMH	R-4	Multi-family	13	30.54
2017	RLM	R-6	Single family	8	18.79
	TOTAL			21	49.33
GRAND TOTAL				665	1,562.09

Table 6: Northeast Quadrant Buildout Projections and Phasing

Year	Zone 2	Zone 7	Zone 14	Zone 15	Zone 25	Cumulative
Existing	2,657	2,309	234	252	1	5,453
2013	0	0	200	100	75	5,828
2014	0	0	200	100	210	6,338
2015	0	0	200	100	206	6,544
2016	0	0	200	100	152	7,050
2017	0	0	110	100	21	7,281
2018	0	0	0	100	0	7,381
Buildout						8,048

Table 7: Citywide Buildout Projections and Phasing

Existing	Dwelling Units	Population
2012	44,600	104,765
2013	44,755	105,129
2014	45,055	105,834
2015	45,605	107,126
2016	46,205	108,535
2017	46,605	109,475
2018	47,005	110,415
Buildout	50,566	118,780

As a result of the fact that much of the open spaces outside of Quarry Creek (Buena Vista Nature Reserve property) are already designated and the only non-residential land use assumed within Zone 25 is open space, non-residential phasing is not provided in this LFMP analysis due to the Zone's negligible non-residential impact on public facilities.

5. CITYWIDE FACILITIES

5.1 CITY ADMINISTRATIVE FACILITIES

5.1.1 Performance Standard

1,500 square feet per 1,000 population must be scheduled for construction within a five-year period or prior to construction of 6,250 dwelling units, beginning at the time the need is first identified.

5.1.2. Facility Planning and Adequacy Analysis

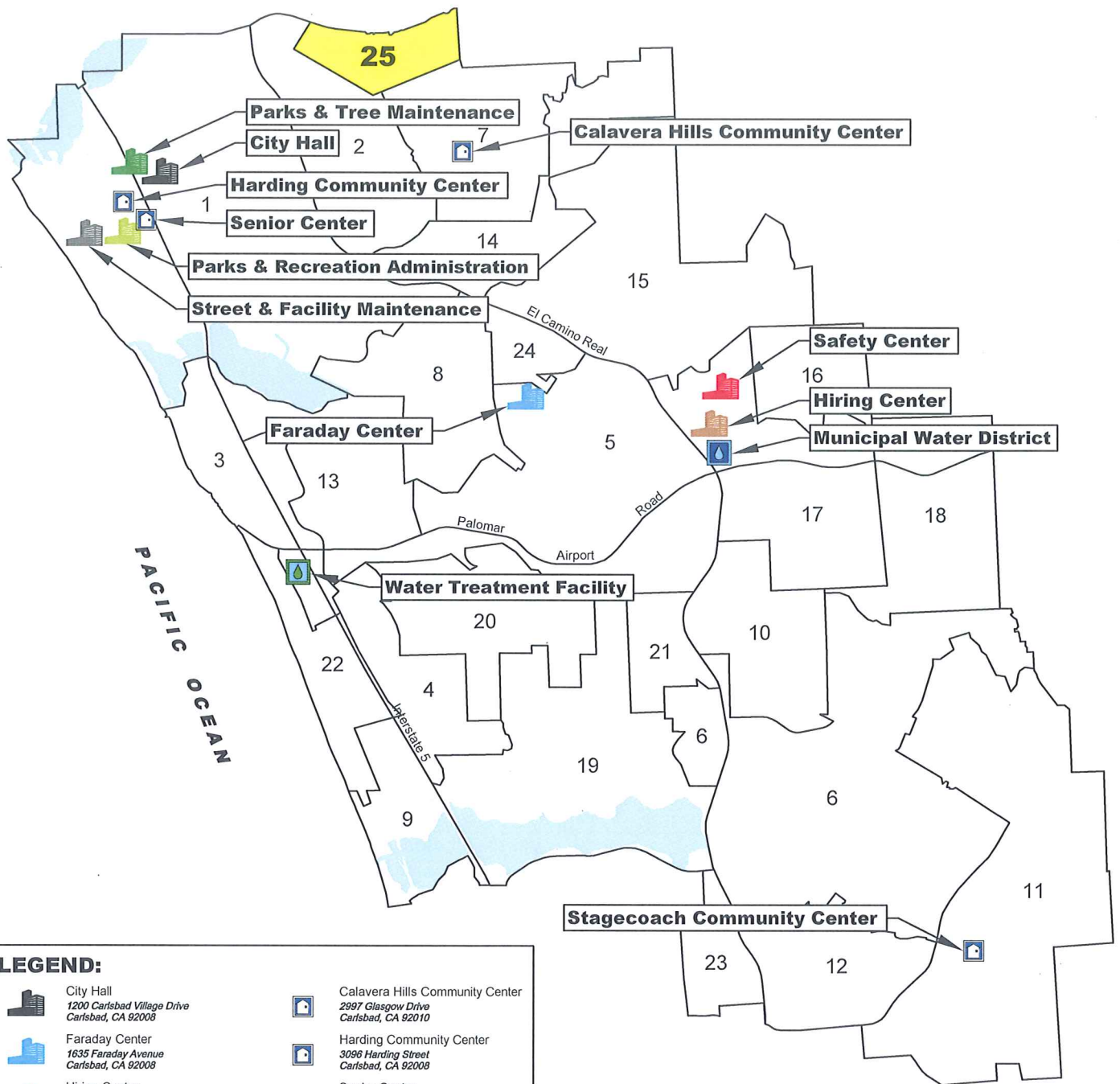
Facility adequacy relative to City Administrative Facilities is based upon an inventory of existing and planned facilities, including those owned and leased by the City. This analysis projects the buildout demand for these facilities and determines compliance with the performance standard. *Figure 8* shows the location of existing and future City Administrative Facilities. The anticipated demand and present supply of City Administrative Facilities is as follows:

5.1.2.1 City Administrative Facilities Demand

The projected demand for City Administrative Facilities is provided on *Table 8*.

Table 8: City Administrative Facilities Demand

	Population	Performance Standard Demand (Sq. Ft.)
Existing (2011)		
Citywide	104,425	156,637
Zone 25	2	3
Buildout		
Citywide	118,780	178,170
Zone 25	1,562	2,343



LEGEND:

- | | |
|--|--|
| City Hall
1200 Carlsbad Village Drive
Carlsbad, CA 92008 | Calavera Hills Community Center
2897 Glasgow Drive
Carlsbad, CA 92010 |
| Faraday Center
1635 Faraday Avenue
Carlsbad, CA 92008 | Harding Community Center
3096 Harding Street
Carlsbad, CA 92008 |
| Hiring Center
5958 El Camino Real
Carlsbad, CA 92010 | Senior Center
799 Pine Avenue
Carlsbad, CA 92008 |
| Carlsbad Municipal Water District
5950 El Camino Real
Carlsbad, CA 92010 | Stagecoach Community Center
3420 Camino de los Coches
Carlsbad, CA 92009 |
| Parks & Recreation Administration
799 Pine Avenue Suite 200
Carlsbad, CA 92008 | Water Treatment Facility
6200 Avenida Encinas
Carlsbad, CA 92009 |
| Parks & Tree Maintenance
1166 Carlsbad Village Drive
Carlsbad, CA 92008 | Safety Center
2560 Orion Way
Carlsbad, CA 92010 |
| Street & Facilities Maintenance
405 Oak Avenue
Carlsbad, CA 92008 | |

Note: All locations are approximate.

CITY ADMINISTRATIVE FACILITIES

LFMP - Zone 25

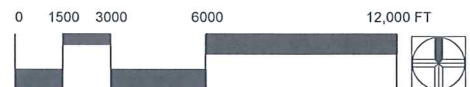


FIGURE 8

5.1.2.2 City Administrative Facilities – Existing Supply

An inventory of the existing supply of City Administrative Facilities is provided on *Table 9*.

Table 9: City Administrative Facilities – Existing Supply (Leased and Owned)

Facility	Dept.	Address	Square Footage
City Administration	City	1635 Faraday Ave.	68,000
City Council Chambers	City	1200 Carlsbad Village Dr.	2,500
City Hall Complex	City	1200 Carlsbad Village Dr.	13,500
City Yard	CSD	405 Oak Ave.	8,249
City Yard Modular Building	CSD	405 Oak Ave.	1,800
Senior Center	H&R	799 Pine St.	6,750
Parks Administration	Parks	1166 Carlsbad Village Dr.	504
Parks Modular/Break Room	Parks	1166 Carlsbad Village Dr.	2,000
Safety Center	Police	2560 Orion Way	64,000
Fleet Yard	Public Works	2480 Impala Dr.	10,358
Water District	Water	5950 El Camino Real	18,000
Water District Modular	Water	5950 El Camino Real	696
TOTAL			196,357

5.1.2.3 Phasing

Table 10 demonstrates the projected supply (existing and future facilities as identified in the above tables) and demand (from *Table 8*) for City Administrative Facilities through buildout (including Zone 25) of the city.

Table 10: City Administrative Facilities Supply/Demand Analysis

Year	Citywide Population	Supply (sq ft)	Demand (At 1,500 sq ft per 1,000 Pop.)	Surplus / [Deficit] (sq ft)
2012	104,765	196,357	157,050	39,307
2013	105,129	196,357	157,650	38,707
2014	105,834	196,357	158,700	37,657
2015	107,126	196,357	160,650	35,707
2016	108,535	196,357	162,750	33,607
2017	109,475	196,357	164,212	32,145
2018	110,415	196,357	165,622	30,735
Buildout	118,780	196,357	178,170	18,187

5.1.2.4 Adequacy Findings

Based on the projected buildout population of 118,780, the demand for City Administrative Facilities will be 178,170 square feet. The existing 196,357 square feet of Administrative Facilities exceeds the Growth Management performance standard and thus the supply of Administrative Facilities is in a surplus situation through buildout of the City. Additionally, the yearly monitoring program will assure that the adopted performance standard is complied with through buildout. As indicated in the analysis on *Table 10*, no deficits occur throughout the Zone 25 buildout period.

5.1.2.5 Mitigation

SPECIAL CONDITIONS

No special conditions.

5.1.2.6 Financing

Funding for all future City Administrative Facilities is guaranteed through the City of Carlsbad Community Facilities District (CFD) No. 1, through buildout of Zone 25 and buildout of the City. Zone 25 property owners must be participants in this CFD program. This participation, in conjunction with payment of public facilities fees with building permits, constitutes the required financial guarantee and applicable mitigation for City Administrative Facilities.

5.2 LIBRARY FACILITIES

5.2.1 Performance Standard

800 square feet per 1,000 population must be scheduled for construction within a five year period or prior to construction 6,250 dwelling units, beginning at the time the need is first identified.

5.2.2 Facility Planning and Adequacy Analysis

This analysis provides an inventory of existing and approved library facilities owned and leased by the City of Carlsbad. Library space (leased/owned, public/non-public) is used as a standard library measurement of customer use and satisfaction and includes collection space, seating, meeting rooms, staff areas, technology, and other public facility needs. The following analysis projects the buildout demand for Library Facilities, identifies existing Library Facilities, and compares the two in order to determine compliance with the adopted performance standard. *Figure 9* shows the location of existing and future library facilities. Existing and buildout library demand is demonstrated on *Table 11*.

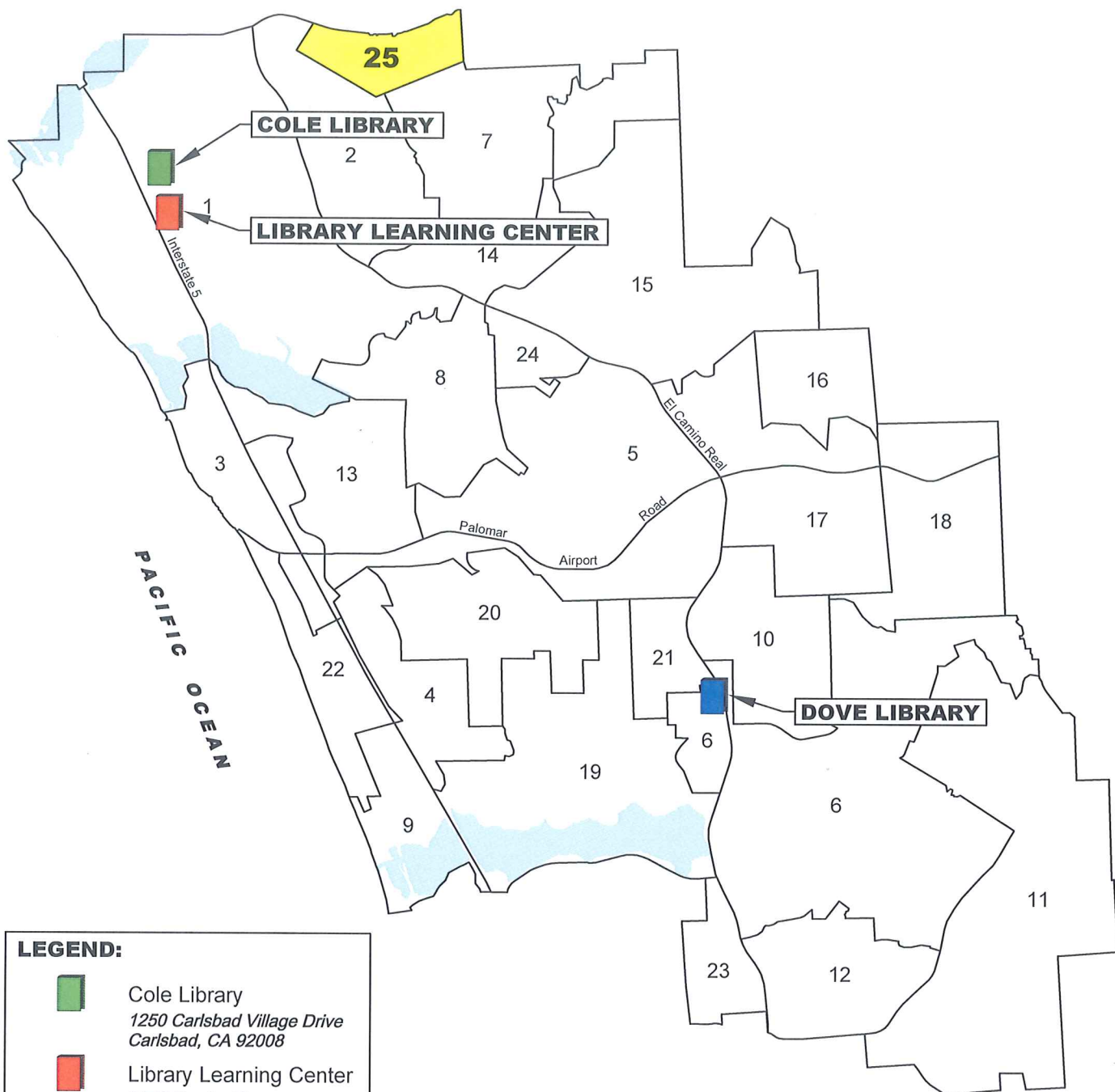
5.2.2.1 Existing and Buildout Library Demand

Table 11: Library Facilities Demand

	Population	Performance Standard Demand (Sq. Ft.)
Existing (2011)		
Citywide	104,425	83,540
Zone 25	2	2
Buildout		
Citywide	118,780	95,024
Zone 25	1,562	1,250

5.2.2.2 Existing Library Inventory

A List of the existing library inventory in the city of Carlsbad is provided in *Table 12*.



LEGEND:



Cole Library
1250 Carlsbad Village Drive
Carlsbad, CA 92008



Library Learning Center
3368 Eureka Place
Carlsbad, CA 92008



Dove Library
1775 Dove Lane
Carlsbad, CA 92011

Note: All locations are approximate.



0 1500 3000 6000 12,000 FT



LIBRARY FACILITIES

LFMP - Zone 25

FIGURE 9

Table 12: Existing Library Inventory

Facility	Library Square Footage
Dove Library	64,000
Cole Library	24,352
Learning Center	11,393
Total Existing Library Facilities	99,745

5.2.2.3 Phasing

The citywide phasing projections identified on *Table 13* of this LFMP were utilized to compare with the existing and future (expansion) library facilities to determine whether anticipated development in Zone 25 (and citywide) is and will continue to comply with the performance standard.

This analysis, on *Table 13*, demonstrates that the performance standard will continue to be met throughout buildout of Zone 25. No deficits of library space are projected.

Table 13: Library Facilities - Supply/Demand Analysis

Year	Citywide Population	Supply (sq ft)	Demand (At 800 sq ft per 1,000 Pop.)	Surplus / [Deficit] (sq ft)
2012	104,765	99,745	83,808	15,937
2013	105,129	99,745	84,104	15,641
2014	105,834	99,745	84,640	15,104
2015	107,126	99,745	85,755	13,990
2016	108,535	99,745	86,824	12,921
2017	109,475	99,745	87,576	12,178
2018	110,415	99,745	88,328	11,417
Buildout	118,780	99,745	95,024	4,721

5.2.2.4 Adequacy Findings

The above analysis concludes that the Library Facilities performance standard is in a surplus situation, and will continue to be in that situation through buildout of Zone 25 and buildout of the City. The yearly monitoring program will ensure that the standard is complied with through this buildout period.

As indicated in *Table 13*, it is projected that the City's population will not trigger the Growth Management Plan requirement to add additional space to the Cole Library before the city reaches buildout. However, structure conditions may require the Cole Library to be reconstructed prior to buildout. A 1998 feasibility study concluded on the Cole Library indicated several structural and building code issues to be addressed within a reasonable time, including compliance with the American's with Disabilities Act (ADA), mechanical, and electrical requirements. The City has already included a building replacement project within the CIP budget, currently scheduled between the years 2020 and buildout.

However, as indicated in the analysis on *Table 13*, Library Facilities supply will be met through buildout of Zone 25.

5.2.2.5 Mitigation

SPECIAL CONDITIONS

No special conditions.

5.2.2.6 Financing

Funding for this facility is also guaranteed by CFD No. 1. The Zone 25 property owners are participants in this CFD program. This participation, in conjunction with payment of public facilities fees with building permits, constitutes the required mitigation for Library Facilities.

5.3 WASTEWATER TREATMENT CAPACITY

5.3.1 Performance Standard

Sewer Treatment plant capacity is adequate for at least a five-year period.

5.3.2 Facility Planning and Adequacy Analysis

5.3.2.1 Inventory

Wastewater treatment in the city of Carlsbad is provided primarily at the Encina Water Pollution Control Facility (EWPCF) and also to a lesser degree at satellite treatment facilities. Ownership as well as treatment capacity of the EWPCF is shared on a percentage basis by six independent sewer districts. *Table 14* lists the six agencies and their ownership treatment capacity:

Table 14: EWA Capacity Analysis

Agency	Percent Ownership	Capacity at EWPCF (MGD)	Existing Flow (MGD)	Remaining Treatment Capacity (MGD)
Vista	26.34	10.67	6.49	1.56
Carlsbad	25.33	10.26	7.90	2.36
Buena	7.41	3.00	1.27	0.99
Vallecitos	18.93	7.67	4.59	2.95
Leucadia	17.55	7.11	4.06	3.05
Encinitas	4.44	1.80	0.96	0.84
TOTAL	100.0	40.51	25.27	11.75

Ownership as well as wastewater treatment capacity of the Encina Wastewater Pollution Control Facility ("EWPCF"), is shared on a percentage basis by six independent sewer districts. The recently completed Encina Wastewater Treatment Facility Phase V expansion will accommodate the ultimate buildout demand for the Carlsbad Sewer Service Area. As a result, the EWPCF currently provides adequate capacity in excess of the adopted performance standard.

Sewer service within the city of Carlsbad is provided by three of the sewer service agencies; the City of Carlsbad, Leucadia County Wastewater District, and Vallecitos Water District. Zone 25 is located within the Buena Vista sewer drainage basin in the City of Carlsbad sewer services area. Development projects within Zone 25 will pay the sewer benefit area fees for this basin at the time of issuance of building permits. Funds expended by developers on installation of regional sewer facilities identified in the Sewer

Master Plan will be reimbursed to the developer, typically through the offsetting of fees. The sewer service areas are demonstrated on *Figure 10*.

All sewage generated by demand from development within Zone 25 will be conveyed through the Buena Vista sewer line and on to the EWPCF. Carlsbad's current sewer Master Plan established 220 GPD/DU as the unit flow generation factor as a basis for projecting the average sewer flows for residential use. Since residential is the primary non-open space land use assumed for Zone 25 buildout, this factor is used to determine buildout sewage generation from Zone 25.

With the completion of the Encina Phase V expansion, adequate sewer treatment capacity exists to ensure compliance with the Growth Management wastewater performance standard through buildout of the Carlsbad sewer service area.

5.3.2.2 Adequacy Findings

The City of Carlsbad Sewer Master Plan conducts an analysis of annual future sewer flow through buildout of the city based on the Carlsbad General Plan land use projections, and indicates that the City's projected buildout flow is approximately 9.87 MGD. The City has however, purchased capacity rights to 10.26 MGD in the Encina expansion project, which ensures adequate wastewater treatment is available to accommodate any unanticipated increase in future sewer flows. This analysis concludes that the adopted performance standard will continue to be met through Zone 25 buildout.

5.3.2.3 Mitigation

Adequate sewer treatment capacity will be able to accommodate buildout sewer flows for the Carlsbad Sewer Service Area. Future development in Zone 25 will be required to pay the sewer connection fee and the sewer benefit area fees for this basin at the time of issuance of building permits for development within Zone 25. Funds expended by developers on installation of regional sewer facilities identified in the Sewer Master Plan shall be reimbursed to the developer. Such reimbursement may be through the offsetting of fees. Payment of these fees and/or installation of reimbursed improvements will mitigate any impacts to the performance standard for Wastewater Treatment resulting from the development of Zone 25.

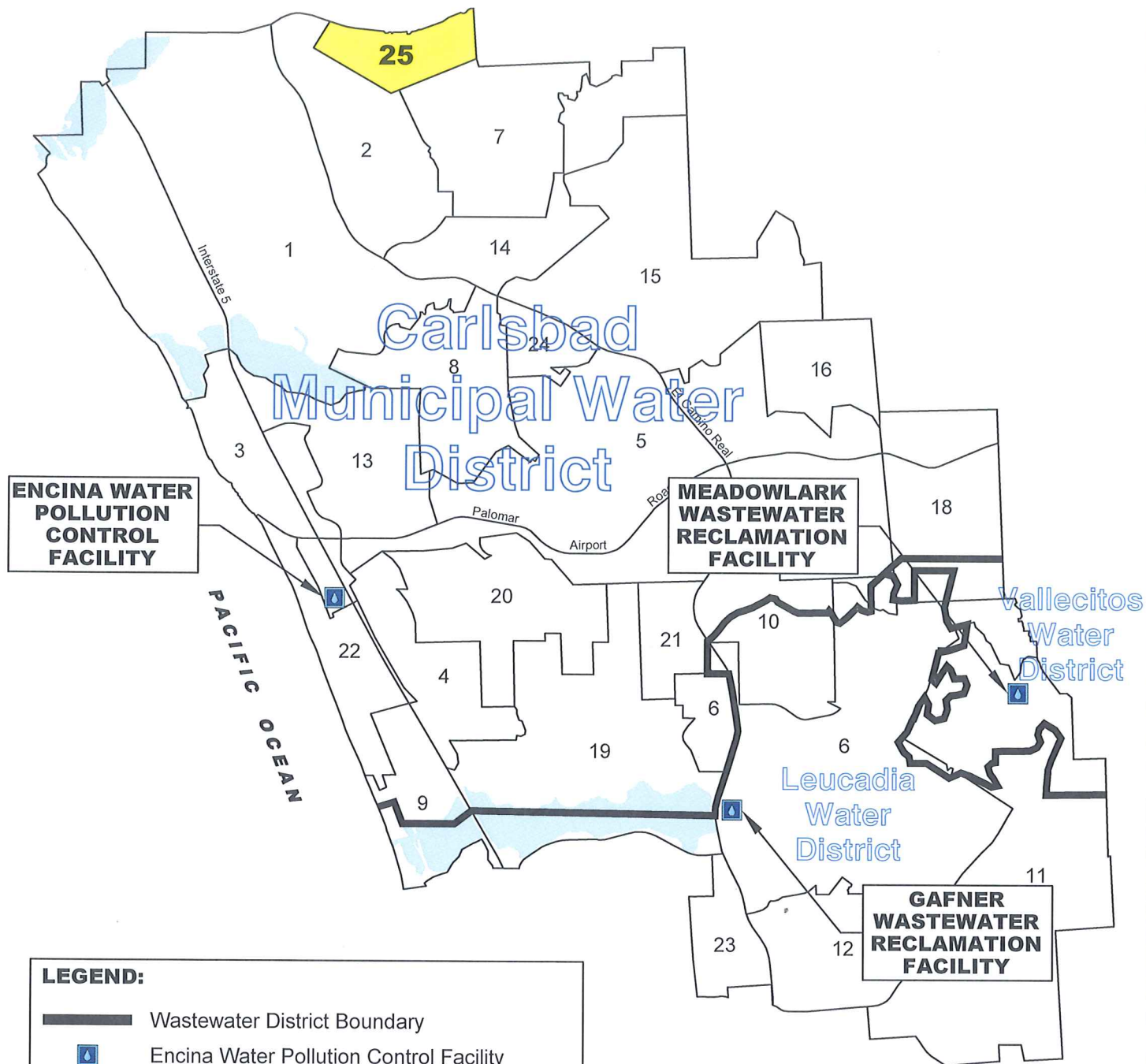
5.3.2.4 Mitigation

SPECIAL CONDITIONS

Future development in Zone 25 will be required to pay the sewer connection fee with each building permit.

5.3.2.5 Financing

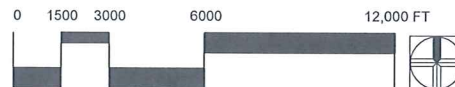
Sewer connection fees provide the primary source of funding for both sewer line upgrades and expansion of treatment plant capacity. The timing of sewer facilities upgrades and the mechanism of financing are critical to analysis of the adequacy of funding for plant expansion. The Carlsbad Sewer Service District has projected Capital Improvement funds to provide for needed facilities.



LEGEND:

-  Wastewater District Boundary
-  Encina Water Pollution Control Facility
6200 Avenida Encinas
Carlsbad, CA 92011
-  Gafner Wastewater Reclamation Facility
1960 La Costa Avenue
Carlsbad, CA 92009
-  Meadowlark Wastewater Reclamation Facility
7941 Corintia Street
Carlsbad, CA 92008

Note: All locations are approximate.



WASTEWATER FACILITIES

LFMP - Zone 25

FIGURE 10

6. LOCALIZED FACILITIES

6.1 PARKS

6.1.1 Performance Standard

Three acres of community park or special use area per 1,000 population within the Park District must be scheduled for construction within a five-year period, or prior to construction of 1,562 dwelling units within the Park District beginning at the time the need is first identified.

6.1.2 Facility Planning and Adequacy Analysis

Park facilities are addressed on a Park District basis. There are four separate park districts within Carlsbad, which correspond to the four quadrants of the city. Zone 25 is located in Park District 2 (Northeast Quadrant) as shown on *Figure 11*.

6.1.2.1 Existing and Buildout Park Demand

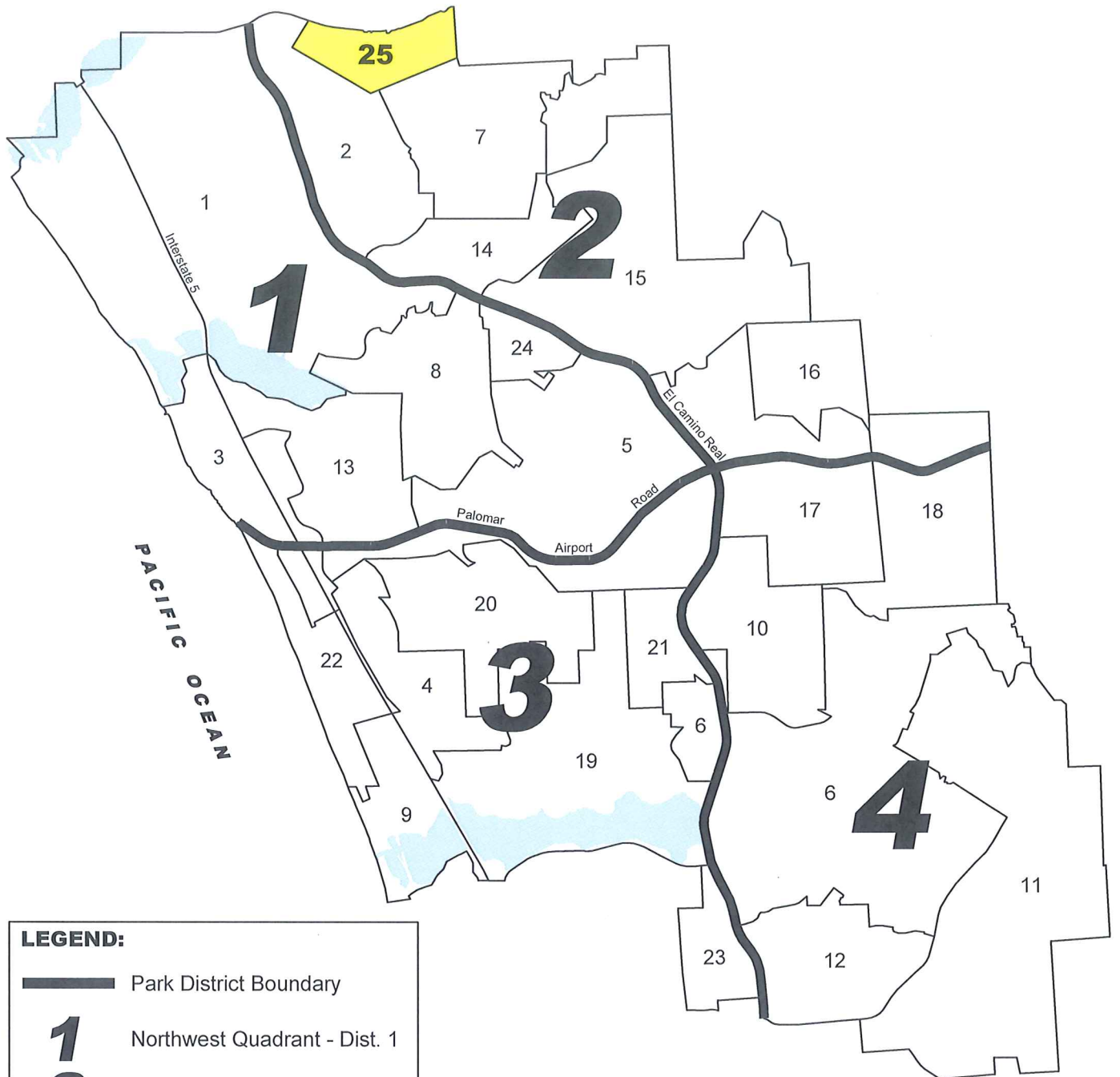
Park demand within Park District 2 between the present time and buildout is projected on *Table 15*.

Table 15: Park District 2 Park Demand

Year	Park Dist. 2 Projected du (Zones 2, 7, 14, 15 & 25)	Park Dist. 2 Projected Population	Park Dist. 2 Projected Park Demand (Acres)
Existing	5,453	12,692	38.07
2013	5,828	13,690	41.07
2014	6,338	14,888	44.66
2015	6,544	15,372	46.12
2016	7,050	16,560	49.68
2017	7,281	17,103	51.94
2018	7,381	17,338	52.01
Buildout	8,048	18,905	56.72

6.1.2.2 Park District 2 Inventory of Existing Park Facilities

Existing and future Community Parks for Park District 2 are shown on *Figure 12*. An inventory analysis of existing Park and special use areas within District demonstrated on *Table 16*.



LEGEND:

-  Park District Boundary
- 1** Northwest Quadrant - Dist. 1
- 2** Northeast Quadrant - Dist. 2
- 3** Southwest Quadrant - Dist. 3
- 4** Southeast Quadrant - Dist. 4



PARK DISTRICTS

LFMP - Zone 25

FIGURE 11

Table 16: Park District 2 Existing Community Park Facilities

Community Park	Type	Ownership	Size (Acres)
Calavera Hills Park	Active	City	16.16
Hidden Canyon Community Park	Active	City	22.20*
Total Existing Park Supply			38.36

* Includes Dog Park

Table 17: Park District 2 Existing Special Use Area Inventory

Special Use Area	Type	Ownership	Size (Acres)
Hope Elementary	Active	CUSD	2.80
Skateboard Park	Active	City	1.00
Total Existing Special Use Area Supply			3.80

Therefore, as shown below on *Table 18*, existing total park supply in Park District 2, including both community parks and special use areas is 42.16 acres.

Table 18: Park District 2 Existing Total Park Supply

Park Facility Type	Size (Acres)
Community Parks	38.36
Special Use Areas	3.80
Existing Total Park Supply	42.16

6.1.2.3 Park District 2 Inventory of Future Park Facilities

In addition to the above-referenced 42.16 acres of existing community parks and special uses areas, the City of Carlsbad CIP indicates that an additional 21.0 acres of future community park credit will be directed to Park District 2 in the projected years 2022-2026. The 2011-2012 CIP shows \$23,240,000 for Veteran's Memorial Park and \$1,650,000 for development of the Robertson Ranch Ballfields, both scheduled for the year 2022-2026 timeframe. Five years prior to that (per the performance standard) would put these facilities on line for park credit in the year 2017.

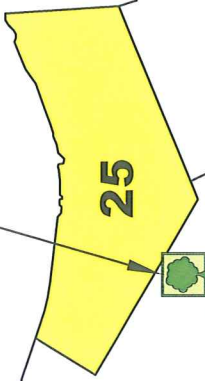
Table 19: Park District 2 Buildout Future Parks

Future Community Park	Type	Ownership	Size (Acres)	Funding Year
Veterans Memorial 100 Ac. (25% credit each park district)	Active/Passive	City	(100) x 25% = 25.0	2022-2026
Robertson Ranch Ballfields	Zone 14 Park	City	13.2	2022-2026
Total Park District 2 Future Park Facilities			38.2	

6.1.2.4 Adequacy Findings

Assuming the facilities identified in the inventory are scheduled and constructed as budgeted, and assuming the adopted residential phasing projections within Park District 2, the following is an anticipated park adequacy analysis (demand in relation to supply) for the Park District from Year 2009 to buildout of the city.

HIDDEN CANYON PARK






DOG PARK

CALAVERA HILLS PARK

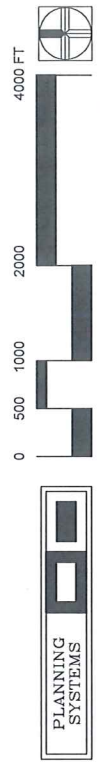
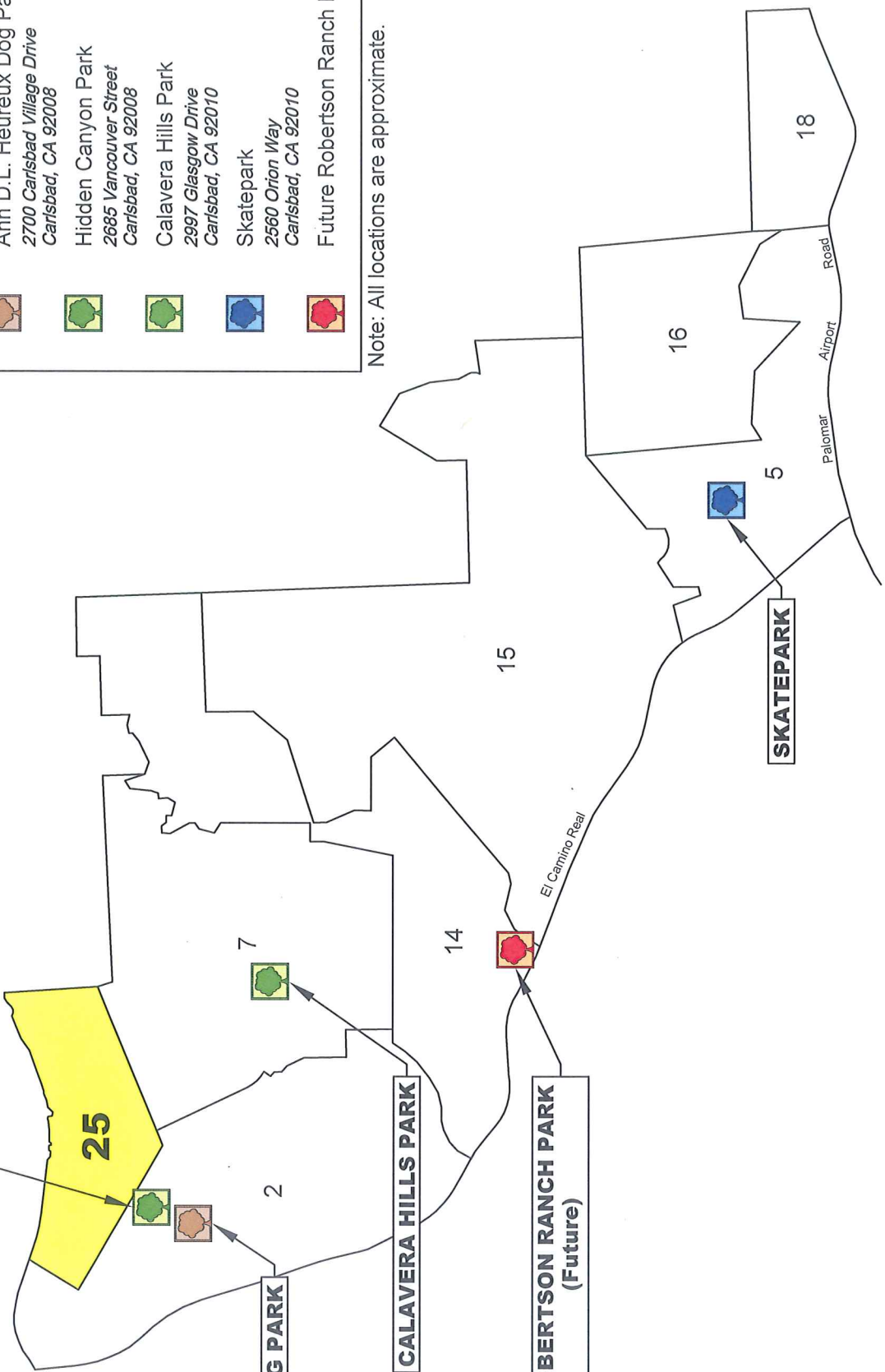
**ROBERTSON RANCH PARK
(Future)**

SKATEPARK

LEGEND:

-  Ann D.L. Heureux Dog Park
2700 Carlsbad Village Drive
Carlsbad, CA 92008
-  Hidden Canyon Park
2685 Vancouver Street
Carlsbad, CA 92008
-  Calavera Hills Park
2997 Glasgow Drive
Carlsbad, CA 92010
-  Skatepark
2560 Orion Way
Carlsbad, CA 92010
-  Future Robertson Ranch Park

Note: All locations are approximate.



PARK DISTRICT 2 PARK FACILITIES

The Growth Management Program allows for a short-term deficit. The adopted performance standard for parks provides an allowance for up to 1,562 dwelling units to be allowed within a deficit situation within the Park District beginning at the time the need is first identified. Note that 1,562 dwelling units equates to 3,669 population, or a maximum of 10.8 acres (1,562 X 3 ac. per 1,000 population) of temporary parkland deficit while improvements are being made.

Based upon the existing parks and special use areas, and the present information regarding City CIP budgeting for Park District 2 park facilities, *Table 20* below demonstrates that Park District 2 is projected to maintain an adequate supply (comply with the performance standard) of Park facilities through buildout of Zone 25. However, additional acreage will be required by 2021.

Table 20: Park District 2 Supply/Demand Analysis

Year	Park Dist. 2 Population	Park Acreage Demand	Park Supply Acreage	Park Acreage Surplus (Deficit)
2012	12,692	38.08	42.16	4.08
2013	13,690	41.07	42.16	1.09
2014	14,888	44.66	42.16	(2.50)*
2015	15,372	46.12	42.16	(3.96)*
2016	16,560	49.68	42.16	(7.52)*
2017	17,103	51.94	42.16	(9.78)*
2018**	17,338	52.01	80.36	28.35
Buildout	18,905	56.72	80.36	23.65

* Temporary deficit situation allowed per performance standard as indicated below.

**Buildout Future Parks (38.2 ac.) from Table 19 added to Supply (5 years in advance of year 2022 construction).

The Parks Performance Standard also requires that adequate Park facilities must be scheduled for construction prior to construction of 1,562 dwelling units in the Park District, if a deficit is identified. As indicated on Table 20, based on the assumed population projections, a Park acreage deficit will begin sometime during the year 2014 at 14,053 population, which is the population which will be adequately served by the Park Supply of 42.16 acres in that year. In the Year 2018, the 5-year construction schedule will begin for the additional 38.2 acres of parkland identified on *Table 19*. In the interim period, between year 2014 and 2018, it is projected that 3,285 population, or 1,398 dwelling units will be constructed within Park District 2. Since 1,398 units are within the allowance of the 1,562 units per the Performance Standard, it is determined that the Park District 2 projections fall within this allowance range. The threshold for triggering the construction of a new park is as follows; once a deficit of park acreage in a quadrant is identified, a new park must be schedule for construction within the timeframe of five years, or before the cumulative construction of 1,562 dwelling units, whichever occurs later. Per City Council Resolution no. 97-435, "scheduled for construction" means that the improvements have been designed, a park site has been selected, and a financing plan for construction of the facility has been approved.

6.1.2.5 Mitigation

SPECIAL CONDITIONS:

- a. All residential development within Zone 25 shall pay park in-lieu fees.
- b. If at any time Zone 25 is found by the City Council to not be in compliance with the parks performance standard, no further residential development will be allowed in Park District 2 or Zone 25 unless actions have been taken by the City to guarantee additional park facilities, such as funding of Veteran's Memorial Park or other special use areas within five years.

6.1.2.6 Financing

Table 21 shows the present financing program for parks within Park District 2, as identified in the Year 2011-2012 CIP.

Table 21: Park Financing

Facility	Funding Program	Amount Budgeted	Acreage
Veteran's Memorial Park	CFD No. 1	\$23,240,000	100.0 Ac. (25.0 Ac. credit/Quadrant)
Robertson Ranch Ballfields Park	Park-in-Lieu (PIL)	\$1,650,000	13.2

6.2 DRAINAGE

6.2.1 Performance Standard

Drainage facilities must be provided as required by the City concurrent with development.

6.2.2 Facility Planning and Adequacy Analysis

Zone 25 is located entirely within the Buena Vista Lagoon watershed. The storm water within this watershed flows through natural drainage courses into Buena Vista Creek, Buena Vista Lagoon, and to the Pacific Ocean.

As indicated in the Citywide Facilities and Improvements Plan, drainage is distinguished from all other public facilities and improvements because, by its very nature, it is more accurately assessed as specific development plans are finalized. However, facilities which serve as “trunk” connections, in that they are not internal to a specific development project, and provide service to several projects or the region, are identified in this document.

The information contained in this report was obtained from the "Master Drainage Plan," dated August 5, 2008. This Master Drainage Plan sets forth the comprehensive local drainage system necessary to meet the long-term needs of the city and is used as a tool in planning for future development and improvements. The LFMP standard stipulates that "major drainage facilities must be provided concurrent with development".

Few urban drainage facilities presently exist within Zone 25. This is due to the fact that the zone is presently undeveloped (except for one single family home), and drainage facilities will be constructed as development progresses.

City of Carlsbad Master Drainage Plan. The "Master Drainage and Storm Water Quality Management Plan," proposes the construction of new facilities to accommodate potential storm events. Construction of the proposed Master Drainage Facilities in conjunction with the adjacent development will ensure the Drainage performance standard is maintained through buildout of the city. The 2008 Carlsbad Drainage Master Plan also updated the Planned Local Drainage Area ("PLDA") fee program to ensure adequate funds are available to fund construction of needed flood control facilities. The estimated costs for these facilities and the programming of PLDA funds are included in the annual Operating Budget and CIP.

Zone 25 is located wholly within the Buena Vista Lagoon watershed of the Carlsbad Hydrologic Unit. The storm water within this watershed flows through Buena Vista Creek, which extends generally east-west through the Quarry Creek site, and continues

west before ultimately entering Buena Vista Lagoon approximately two miles downstream of the site. The entirety of Zone 25 drains into Buena Vista Creek.

The Carlsbad Growth Management program requires that drainage facilities be provided as required by the City concurrent with development. As a result, all future development within Zone 25 will be required to construct necessary storm drain facilities identified in the Drainage Master Plan (*Figure 13*) and the LFMP as determined by the City Engineer. The Drainage Master Plan indicates that a total of three gabion structures and slope stabilization within the AFA drainage tributary shall be constructed to reduce runoff velocities and aid in the reduction of downstream sediment transport.

Quarry Creek Development Drainage Facilities. The Quarry Creek project, proposed for the Hansen Aggregates properties, will provide the substantive development potential for Zone 25 buildout. As such, the Quarry Creek project will be responsible for the construction of drainage improvements within their project, and connecting to the other existing and planned facilities within and around Zone 25. These facilities will constitute the drainage facilities that are required "concurrent with development" per the performance standard.

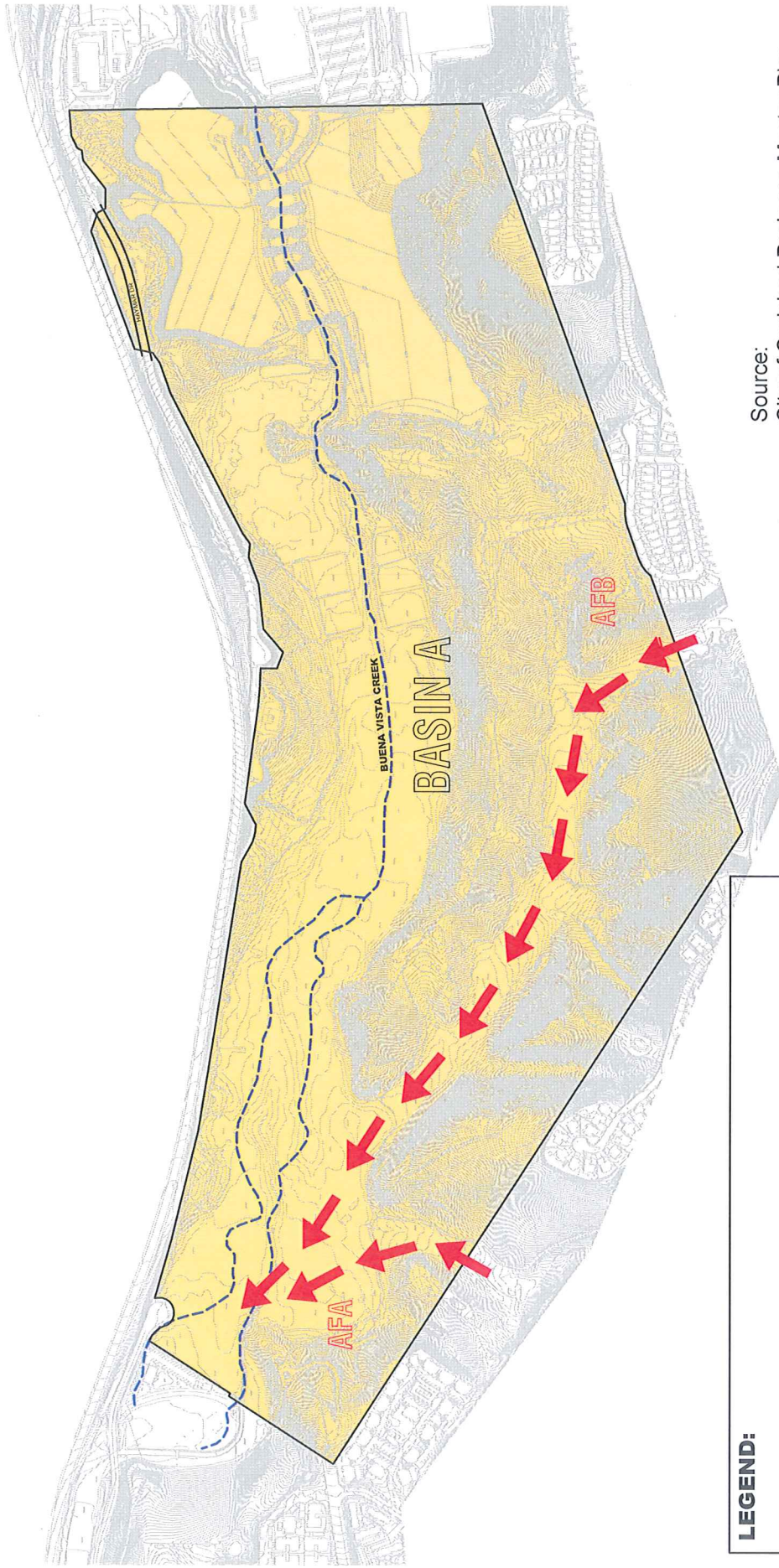
The Quarry Creek project will provide the Zone 25 drainage facilities as indicated on *Figure 14*. This drainage infrastructure program will not only transport drainage in a manner which complies with the City's Master Plan, but will also incorporate best management practices (BMP's) as follows:

Source control BMP's. Source control BMP's will be provided including resident educational programs, maintenance practices, pest control management, etc.

Site Design BMP's – Water quality facilities will be provided in locations to be determined during the Site Development Plan and/or Tentative Subdivision Map process. These facilities are intended to treat the water with bio-treatment in accordance with best management practices for storm water in order to treat potential contaminants in storm water run-off reaching natural drainage courses downstream from the project site. All runoff from developed planning areas will be treated prior to draining downstream into the Buena Vista Creek.

Treatment Control BMP's – A large amount of storm water on-site will be directed to landscape areas to dissipate and filter pollutants through the use of select planting material in water quality facilities before the drainage reaches Buena Vista Creek. Such facilities collect and slowly convey runoff flow to downstream locations and function by filtering water through and infiltrating into the underlying soils, thereby providing treatment of runoff before it moves downstream in Buena Vista Creek.

Hydromodification - In accordance with the Municipal Permit and final hydromodification management plan (HMP) dated March 2011, the project will employ a hydromodification management strategy which will implement measures so that post-development runoff rates and durations do not exceed pre-project conditions. The project will utilize storm water management features that have been sized based on BMP sizing approach for hydromodification management.



LEGEND:

— Creeks

BASIN A Buena Vista Watershed

AFB Facility Designation:

- First letter is BASIN DESIGNATOR
- Following letter(s) are the FACILITY DESIGNATOR

 Future planned enhanced natural channel

Source:
City of Carlsbad Drainage Master Plan
(August 5, 2008) - Plate Index A-2.

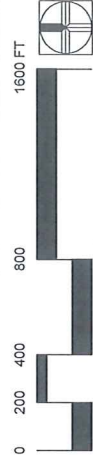
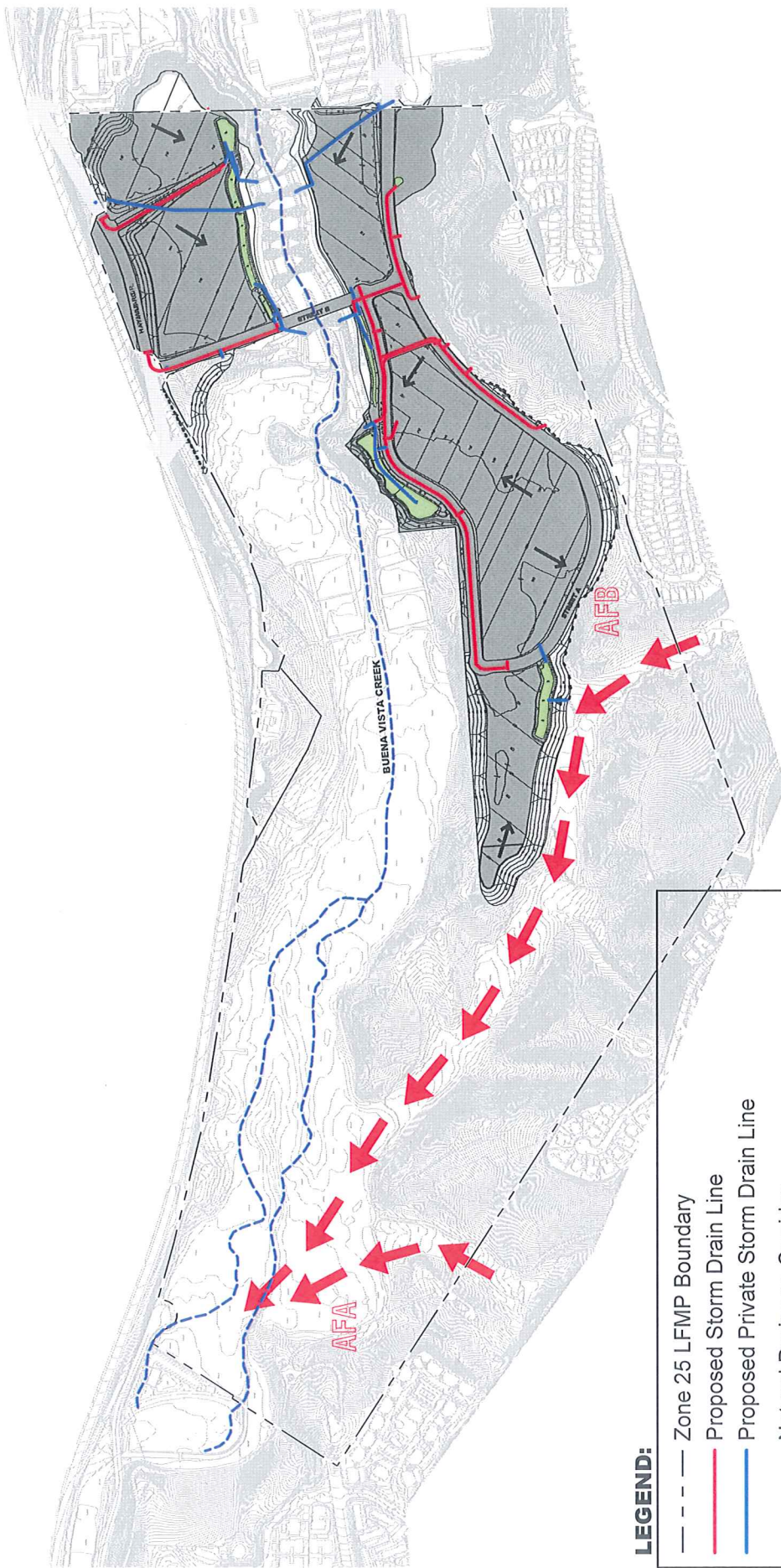


FIGURE 13

CARLSBAD MASTER DRAINAGE PLAN - ZONE 25

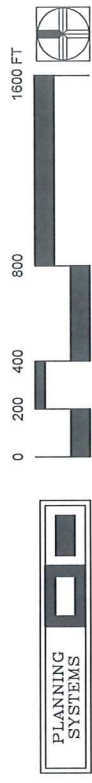


LEGEND:

- Zone 25 LFMP Boundary
- Proposed Storm Drain Line
- Proposed Private Storm Drain Line
- - - Natural Drainage Corridor
- Development
- Proposed Water Quality Hydro-modification Basins
- Pad Direction of Flow
- AFB
- Facility Designation:
 - First letter is BASIN DESIGNATOR
 - Following letter(s) are the FACILITY DESIGNATOR
- Future planned enhanced natural channel

Source:

- Draft Quarry Creek Master Plan - Master Drainage Plan (March 2012)
- City of Carlsbad Drainage Master Plan (August 5, 2008) - Plate Index A-2.



ZONE 25 DRAINAGE FACILITIES

LFMP - Zone 25

6.2.2.1 Phasing

The approach to phasing employed by this Local Facilities Management Plan is based upon ensuring that needed facilities are in place prior to or concurrent with development of the area. The watershed boundary covers the entire Zone 25 area and correlates with the natural drainage basin for the area. Thresholds for the major drainage facilities within this watershed can be easily established, thereby determining the appropriate timing and mitigation measures.

6.2.2.2 Adequacy Findings

Installation of necessary drainage facilities in general accordance with this Local Facilities Management Plan will be a condition of approval for any future development within Zone 25 so that conformance with the adopted performance standard will be maintained.

6.2.2.3 Mitigation

SPECIAL CONDITIONS:

- a. All future development in Zone 25 may be required to construct necessary future Zone 25 storm drain facilities identified in the Drainage Master Plan as determined by the City Engineer. Any facilities necessary to accommodate an individual phase of future development must be guaranteed or provided for prior to the recordation of any final map, issuance of a grading permit or building permit, whichever occurs first, for any development phase requiring storm drain facilities in Zone 25.
- b. Prior to the recordation of any final map, issuance of any grading permit or building permit, whichever occurs first for any specific subdrainage area within Zone 25, the developers of that project are required to pay City of Carlsbad drainage fees. Notwithstanding that amendments to the Land Use Element of the Carlsbad General Plan are anticipated on the Quarry Creek property, drainage fees on this property will be based upon the Low-Medium Residential (RLM) and Open Space (OS) land use designations, inasmuch as those are the designations assumed in the Carlsbad Drainage Master Plan, upon which the overall drainage fee calculations and assumptions have been based. Also, in the event that a developer in Zone 25 installs drainage improvements which are assumed for funding through the PLDA Fee program, the developer may enter into a reimbursement agreement with the City for repayment of funds expended on PLDA improvements.
- c. Prior to the recordation of any final map, issuance of a grading permit or building permit, whichever occurs first for any project within Zone 25, the developers of that project are required to financially guarantee the construction of the storm drainage facilities that are determined by the City Engineer to be affected by the development and required for that phase of development that is proceeding.

6.2.2.4 Financing

The Master Drainage Plan (MDP) stipulates that the primary method of financing drainage facilities is through direct construction as a condition of development approval.

6.3 CIRCULATION

6.3.1 Performance Standard

No road segment or intersection in the LFMP zone nor any road segment or intersection out of the zone which is impacted by development in the zone shall be projected to exceed a service level C during off-peak hours, nor service level D during peak hours. Impacted means where 20 percent or more of the traffic generated by the Local Facility Management Zone will use the road segment or intersection.

6.3.2 Facility Planning and Adequacy Analysis

The purpose of this analysis is to determine whether or not the circulation system within Zone 25 conforms to the adopted performance standards. It will also address all Circulation Element road segments and intersections outside of Zone 25 impacted by 20 percent or more of the traffic generated by Zone 25.

This section is based on the Traffic Impact Analysis for the Quarry Creek Master Plan, prepared by Urban Systems Associates, Inc. dated June 7, 2012. The report analyzes existing conditions, Near-Term + Zone 25 Development Conditions, and Buildout + Zone 25 Development Conditions.. Assumptions were made in the traffic report as to the location of development in each phase. The location of development is based upon the draft Quarry Creek Master Plan. Phasing assumptions are based on those assumed in this LFMP Amendment document.

The location of proposed development within each phase is for planning purposes only. The actual location and phasing of development may affect the timing for provision of roadway improvements, inasmuch as the development of such improvements may not occur until the development requiring the need for the roadways are constructed.

In the event that it is determined that particular circulation facilities need to be accelerated or delayed as a result of changes in the location and/or timing of land use development, the timing of the required roadway improvements may be modified without amendment to this plan.

6.3.2.1 Inventory of Arterials

This analysis assumes existing roadways within the area of zone 25, but assumes no Rancho Del Oro interchange or extension of Marron Road across Zone 25. The existing arterial system serving Zone 25 is shown on *Figure 15*. Zone 25 will have access from Marron Road, which currently extends through the Quarry Creek Shopping Center from College Boulevard in the city of Oceanside. Marron Road is the single Circulation Element arterial within the zone. Marron Road is shown as a secondary collector, but is proposed to be removed from the city's circulation element with the Quarry Creek Master

Plan project. Therefore for purposes of this LFMP traffic analysis, Marron Road is project to extend into the Quarry Creek Master Plan property from the east only with no westerly connection to El Camino Real, thus avoiding constructing Marron Road through the Buena Vista Ecological Reserve property.

Table 22: Roadways within Zone – Proposed for Removal from Circulation Element

Road Segment	Classification	ROW
Marron Road	Four-lane secondary arterial	84 ft.

6.3.2.2 Traffic Generation from Zone 25

The purpose of this analysis is to evaluate impacted road segments and intersections that are impacted by at least 20 percent of the traffic projected to be generated by Zone 25 traffic, based on the assumed phasing of development and roadway/traffic improvements. Computer travel forecasts used for the analysis of Year 2010, Year 2015, and Year 2030 (assumed buildout) were evaluated using surrounding traffic volume estimates using the SANDAG Regional Transportation Model for Carlsbad, assumed buildout in Year 2030.

As can be seen on *Figure 16*, under the proposed scenario in which Marron Road is eliminated from the Circulation Element, only one roadway segment within the city of Carlsbad will be impacted by 20% or more of the traffic from Zone 25. This roadway segment is College Boulevard from the north city limits to Carlsbad Village Drive.

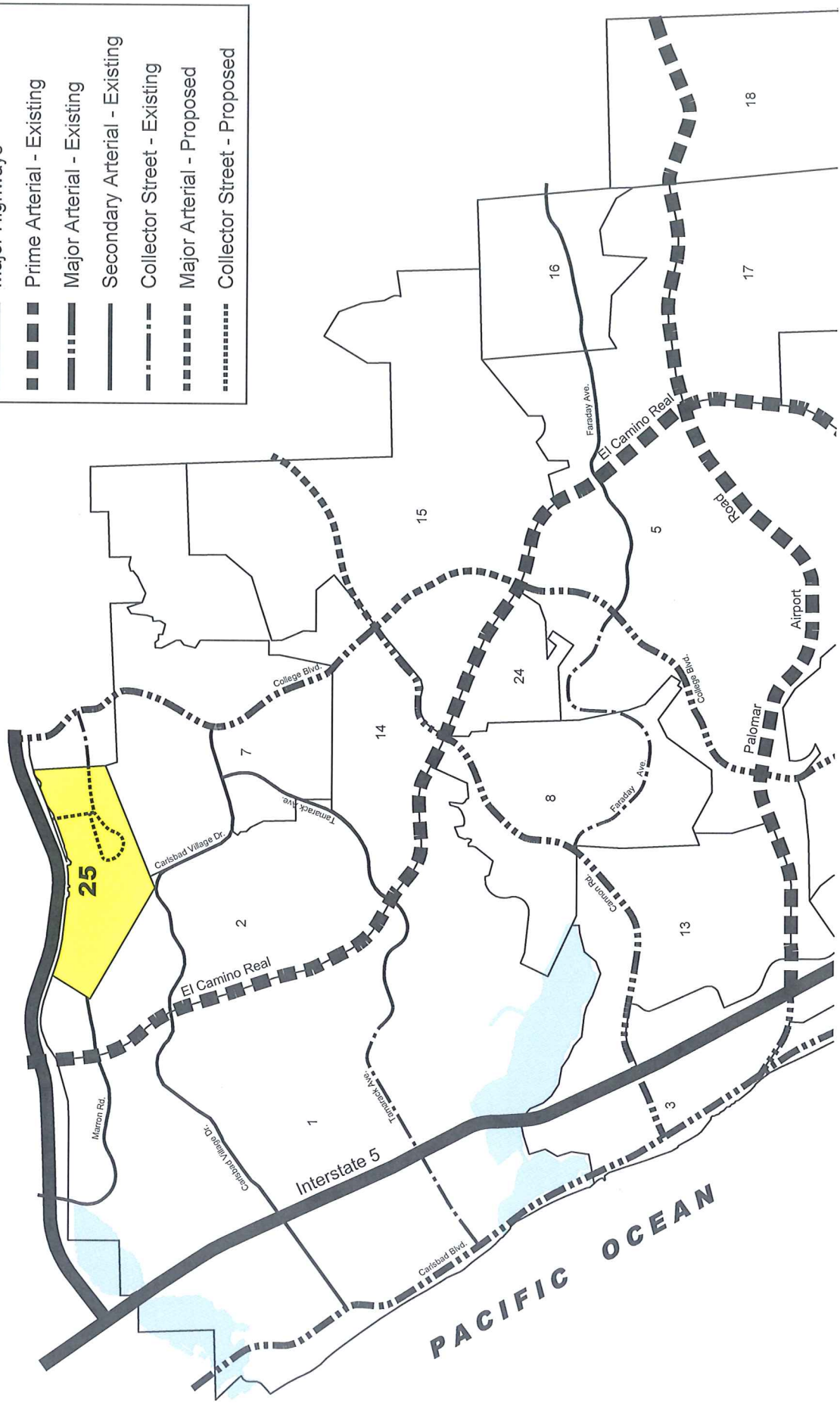
As shown on *Table 23*, the buildout development of Zone 25 is expected to generate 5,668 average daily trips ("ADT"), broken down as 476 AM peak hour trips, and 581 PM peak hour trips.

Table 23: Projected Trip Generation

Use	Amount	Trip Rate	ADT	AM Peak Hour (ADT)	PM Peak Hour (ADT)
Apartments (R-1)	99	6/du	594	48	53
Attached (R-1, R-2)	232	8/du	1,856	148	186
Attached (R-3)	81	8/du	648	52	65
Attached (R-4)	125	8/du	1,000	80	100
Att/Detached (R-4)	63	10/du	630	50	63
Att/Detached (R-5)	56	10/du	560	45	56
SFD	9	10/du	90	7	9
Community Facilities	1.5	100/ac	150	26	28
Park & Ride	28 Spaces	5/Space	140	20	21
TOTAL			5,668	476	581

LEGEND:

- Major Highways
- Prime Arterial - Existing
- Major Arterial - Existing
- Secondary Arterial - Existing
- Collector Street - Existing
- Major Arterial - Proposed
- Collector Street - Proposed



PLANNING SYSTEMS

0 1000 2000 4000 8000 FT

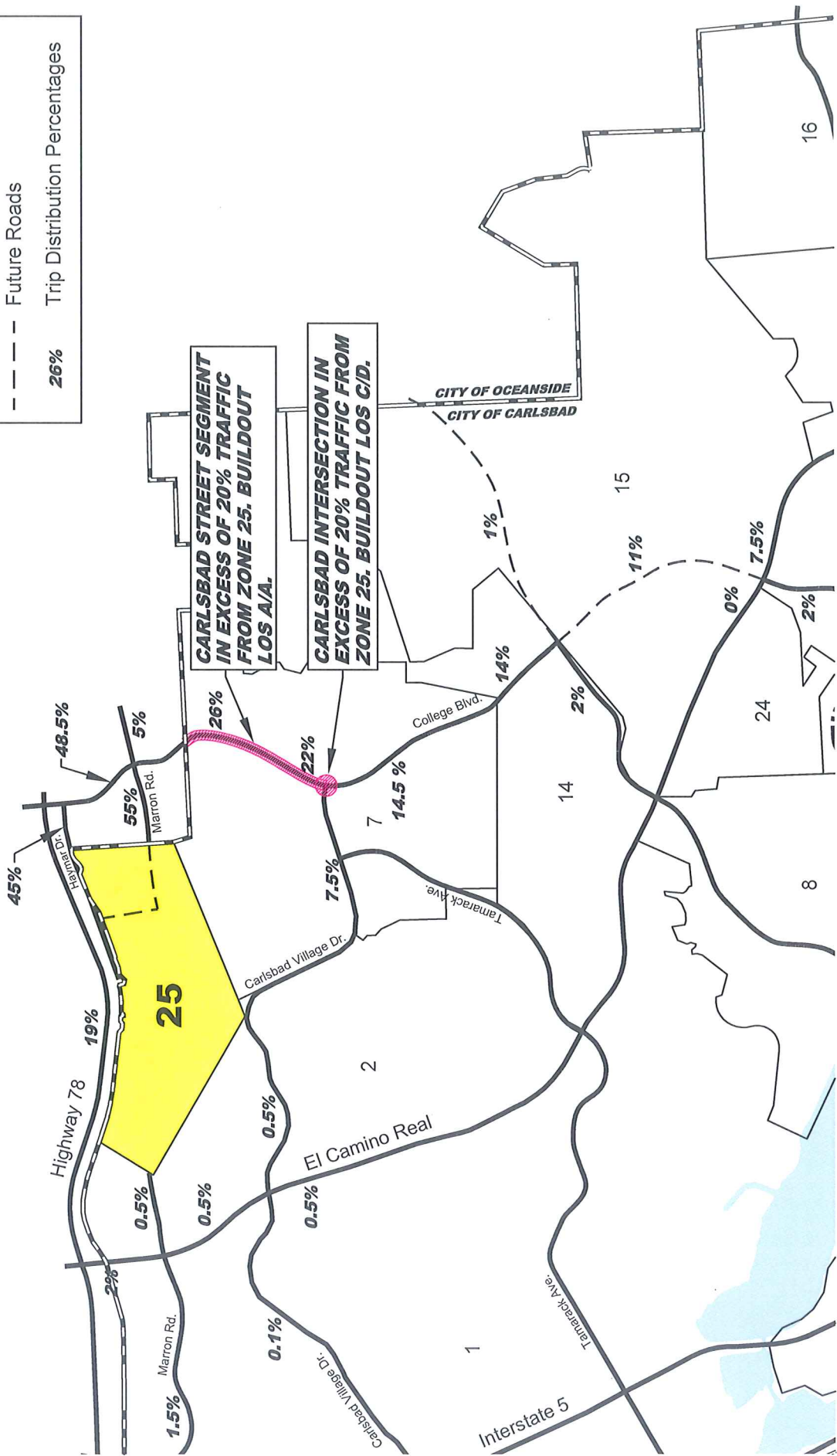
ARTERIAL CIRCULATION

LFMP - Zone 25

FIGURE 15

LEGEND:

- Existing Roads
- Future Roads
- 26% Trip Distribution Percentages



0 750 1500 3000 6000 FT

PLANNING SYSTEMS

CARLSBAD PROJECT TRIP DISTRIBUTION PERCENTAGES

FIGURE 16

6.3.2.3 Phasing- Existing Conditions

Figure 16 shows the Existing Zone 25 traffic distributions on arterial roadway segments that are projected to have 20 percent or greater amount of Zone 25 traffic. . The only street segment within Carlsbad projected to carry 20% or more of Zone 25 traffic is College Boulevard between the Oceanside city boundary and Carlsbad Village Drive.

Table 24 identifies traffic level of service for existing conditions plus Zone 25 traffic for the street segment which is within Carlsbad and is also impacted with 20 percent or more of Zone 25 traffic. This segment of College Boulevard between Oceanside boundary and Carlsbad Village Drive would operate at LOS A, and therefore it complies with the level of service standard of at least Level of Service (LOS) “D” during peak hours.

Table 24: Zone 14 Existing + Zone 25 Street Segment Levels of Service

Street Segment	20% Zone 25	Class.	AM Peak Hour Volume	AM LOS	PM Peak Hour Volume	LOS
College Blvd.						
North City Boundary to Carlsbad Village Dr. - Northbound	Yes	4 Lane Secondary Arterial	994	A	1,585	A
North City Boundary to Carlsbad Village Dr. - Southbound	Yes	4 Lane Secondary Arterial	1,971	A	1,012	A

Table 25 demonstrates the projected comparison of intersection peak hour levels of service with projected existing Zone 25 traffic, and background existing traffic together on the intersections within Carlsbad identified as having 20 percent or greater traffic from Zone 25 buildout development (existing plus project). As shown, only one intersection qualifies as having 20% of the Zone 25 traffic travelling through that intersection. This intersection has been evaluated and it is concluded that it operates at LOS C in the AM Peak Hour, and A in the PM Peak Hour. Both of these levels are within the minimum Growth Management Program Criteria of LOS “D” during peak hours.

Table 25: Zone 25 Existing + Zone 25 Project Intersections LOS

INTERSECTION	20% Zone 25	AM Peak Hour Control Delay	AM Peak Hour LOS	PM Peak Hour Control Delay	PM Peak Hour (LOS)
College Blvd/ Carlsbad Village Drive	Yes (22%)	0.71	C	0.51	A

6.3.2.4 Phasing – Near-Term Conditions

Table 26 shows the Near-Term plus Zone 25 traffic distribution arterial roadway segments that are projected to have 20 percent or greater amount of Zone 25 traffic. Only one roadway segment falls into this category – College Boulevard from the north City of Carlsbad boundary to Carlsbad Village Drive.

Table 26: Zone 25 Near-Term Street Segment Levels of Service

Street Segment	20% Zone 25	Class.	AM Peak Hour Volume	AM LOS	PM Peak Hour Volume	LOS
College Blvd.						
City boundary to Carlsbad Village Dr. - Northbound	Yes	4 Lane Secondary Arterial	610	A	1,558	A
City boundary to Carlsbad Village Dr. - Southbound	Yes	4 Lane Secondary Arterial	1,775	A	748	A

Table 27 identifies the Near-Term plus Zone 25 traffic LOS for intersections impacted by 20 percent or more of Zone 25 traffic. Only one intersection falls into this category – the College Boulevard/Carlsbad Village Drive intersection.

Table 27: Zone 25 Near-Term Intersections Level of Service

INTERSECTION	20% Zone 25	AM Peak Hour Control Delay	AM Peak Hour LOS	PM Peak Hour Control Delay	PM Peak Hour (LOS)
College Blvd/ Carlsbad Village Drive	Yes	45.1	D	20.3	C

6.3.2.5 Phasing – Buildout Conditions

Table 28 demonstrates the street segments levels of service predicted for Buildout conditions, including traffic generated from the buildout of Zone 25. This Building analysis assumes the land uses identified for Zone 24 in this LFMP, and also assumes the deletion of the Marron Road extension link between College Boulevard and El Camino Real. It also assumes the deletion of the Rancho Del Oro interchange with SR-78 and assumes the deletion of the Rancho Del Oro extension to Marron Road.

Table 28: Zone 25 Buildout Street Segment Levels of Service

Street Segment	20% Zone 25	Class.	AM Peak Hour Volume	AM LOS	PM Peak Hour Volume	LOS
College Blvd.						
City boundary to Carlsbad Village Dr. - Northbound	Yes	4 Lane Secondary Arterial	723	A	1,874	A
City boundary to Carlsbad Village Dr. - Southbound	Yes	4 Lane Secondary Arterial	1,517	A	1,042	A

Table 29 demonstrates the intersection levels of service projected intersections within Carlsbad which are impacted (20% or greater of traffic generated by Zone 25) by Zone 25 traffic. Only one intersection meets these criteria.

Table 29: Zone 25 Buildout Intersections Level of service

INTERSECTION	20% Zone 25	AM Peak Hour Control Delay	AM Peak Hour LOS	PM Peak Hour Control Delay	PM Peak Hour (LOS)
College Blvd/ Carlsbad Village Drive	Yes	37.3	D	32.4	C

6.3.3 Adequacy Findings

Existing + Zone 25. The evaluation of projected existing plus Zone 25 conditions indicates that Zone 25 study area street segments and intersections within Carlsbad would continue to operate acceptably and within the Growth Management Program circulation performance standards.

Near-Term + Zone 25. The evaluation of projected near-term plus Zone 25 conditions indicates that the Zone 25 study area street segments and intersections within Carlsbad will continue to operate acceptably and within the performance standards.

Buildout Conditions. All evaluated study area street segments and intersection are projected to operate at least at a minimum of LOS “D” during peak hours.

6.3.4 Mitigation

SPECIAL CONDITIONS:

- a. All on-site circulation roadways serving properties within Zone 25 shall be designed, security posted and constructed as required by the City of Carlsbad.
- b. An ongoing monitoring program will evaluate the aspects of improvements, development, and demand on circulation facilities. The required timing of improvements is based upon the projected demand of development in the zone and the surrounding region. This timing may be modified without amendment to this plan; however, any deletions or additions to the improvements will require amending this local plan.

6.3.5 Financing

- a. All on-site circulation roadways serving properties within Zone 25 shall be funded by the developer(s) of Zone 25 properties.

6.4 FIRE FACILITIES

6.4.1 Performance Standard

No more than 1,500 dwelling units will be allowed outside of a 5 minute response time.

6.4.2 Facility Planning and Adequacy Analysis

6.4.2.1 Existing Situation

The majority (eastern 75%) of Zone 25 is located within the 5-minute response time of City of Oceanside Fire Station No. 4, located at the intersection of Thunder Dr. and Lake Dr. in Oceanside. The western 40% is located within the 5-minute response time of Carlsbad Fire Station No. 1, located at Carlsbad Village Drive, east of Pio Pico Drive. There is some overlap of response time in the central part of the zone. Development within Zone 25 will occur wholly in the eastern half of the zone, primarily within the Quarry Creek Master Plan area. The Oceanside station is approximately 0.8 mile from the Quarry Creek Master Plan site. The Cities of Oceanside and Carlsbad have a joint response agreement which dictates that the manned station which is closest (can provide the fastest response) to the subject emergency, shall respond. Carlsbad Fire Station #3 is proposed to be constructed near the corner of Cannon Road and Wind Trail Way, approximately 2.5 miles south of Quarry Creek, however the response time for this station does not overlap into Zone 25. The five-minute response time for these fire stations to Zone 25 is shown on *Figure 17*.

6.4.2.2 Buildout Situation

As shown in *Figure 17*, Zone 25 is located within the 5-minute response time of City of Oceanside Fire Station No. 4, located at the intersection of Thunder Dr. and Lake Dr. in Oceanside. This station is approximately 0.8 mile from the Quarry Creek site. The Cities of Oceanside and Carlsbad have a joint response agreement which dictates that the manned station which is closest (can provide the fastest response) to the subject emergency, shall respond.

6.4.3 Adequacy Findings

As shown on *Figure 17*, the entire buildout urbanized area of Zone 25, including all residential units, will be located within the 5-minute response time from Oceanside Fire Station No. 4. Therefore, the zone is in compliance with the performance standard.

6.4.4 Mitigation

SPECIAL CONDITIONS:

None

6.4.5 Financing

All fire facilities are in place for Zone 25 and the required performance has and will continue to be complied with; therefore, no special funding mechanisms are required.

**Oceanside F.S.
(Lake Blvd. & Thunder Dr.)**

LEGEND:

Existing Fire Stations

Proposed Fire Station

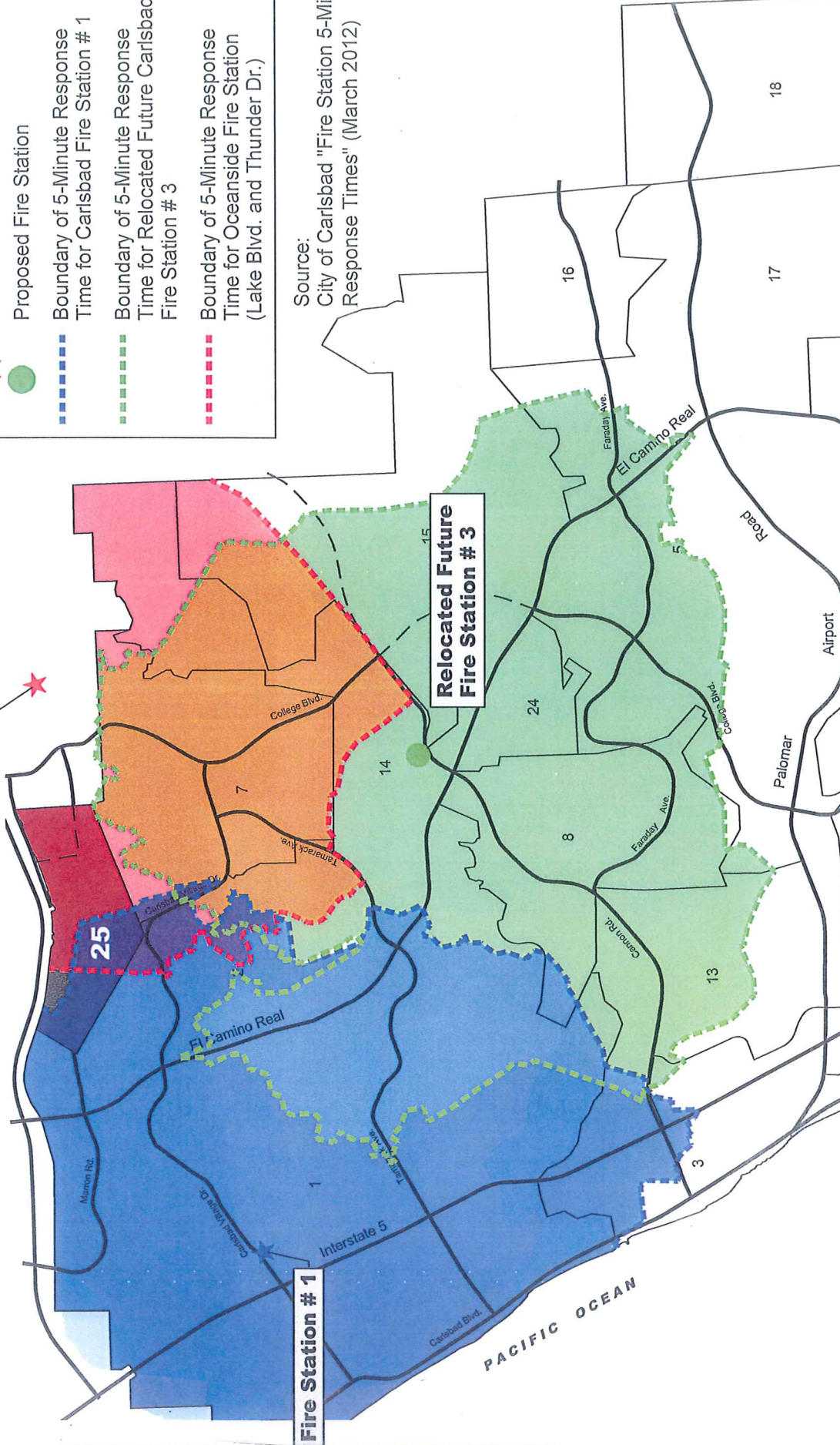
Boundary of 5-Minute Response
Time for Carlsbad Fire Station # 1

Boundary of 5-Minute Response
Time for Relocated Future Carlsbad
Fire Station # 3

Boundary of 5-Minute Response
Time for Oceanside Fire Station
(Lake Blvd. and Thunder Dr.)

Source:

City of Carlsbad "Fire Station 5-Min.
Response Times" (March 2012)



0 1000 2000 4000 8000 FT



FIRE RESPONSE TIME ANALYSIS

FIGURE 17

LFMP - Zone 25

PAGE 56

6.5 OPEN SPACE

6.5.1 Performance Standard

Fifteen percent of the total land area in the zone, exclusive of environmentally constrained nondevelopable land, must be set aside for permanent open space and must be available concurrent with development.

6.5.2 Facility Planning and Adequacy Analysis

Growth Management LFMP performance standard open space consists of; (1) developed open space areas within existing and approved projects and (2) unconstrained undeveloped open space throughout the zone. Unconstrained undeveloped open space is land that will remain as permanent open space and is free of environmental constraints. Pursuant to the Growth Management Program, the identified environmental constraints include beaches, permanent bodies of water, floodways, slopes greater than 40 percent in gradient, significant wetlands, significant riparian habitats, significant woodland habitats, major power line easements, railroad track beds, and other significant environmental features as determined by the environmental review process. Slopes consisting of a gradient between 25 percent and 40 percent and powerline easements that are improved for open space purposes also can qualify as open space facilities.

6.5.2.1 Inventory of Open Space Demand

The performance standard requires that a minimum of 15 percent of the total land area within the zone (exclusive of environmentally constrained nondevelopable land) must be set aside as permanent open space. The gross Zone 25 land area totals 294.3 acres. Calculated at a 15 percent ratio per the performance standard, total open space demand for Zone 25 must total at least 44.1 acres.

6.5.2.2 Existing Inventory of Open Space Supply

An inventory of open space within Zone 25 that qualifies as performance standard open space pursuant to Growth Management requirements under the existing Land Use Element of the General Plan is shown on *Figure 18*. These non-environmentally constrained areas total approximately 96.3 acres.

6.5.2.3 Proposed Inventory of Open Space Supply

An inventory of open space within Zone 25 that qualifies as performance standard open space pursuant to Growth Management requirements under the proposed Land Use Element per the Quarry Creek project amendments is shown on *Figure 19*. These areas non-environmentally constrained areas total approximately 140.1 acres, including open

space preserves, community recreation areas, detention and water quality basins and environmental mitigation areas and buffers.

The results of the open space supply/demand analysis for Zone 25 per the development plan proposed with the Quarry Creek Master Plan are shown on *Table 30*.

Table 30: Open Space Supply/Demand

	Acres
Buildout Zone 25 Open Space Supply	140.1
15% Total Land Area Demand	44.1
Excess Open Space	96.0

6.5.2.4 Phasing

The analysis demonstrated on *Table 30* concludes that existing open space will exceed the performance standard demand at buildout, when the maximum amount of development has taken place in the zone, and therefore, no additional phasing analysis of open space is required to be performed.

6.5.3 **Adequacy Findings**

Sufficient qualifying open space exists in Zone 25 so that all development will comply with the adopted performance standard through buildout.

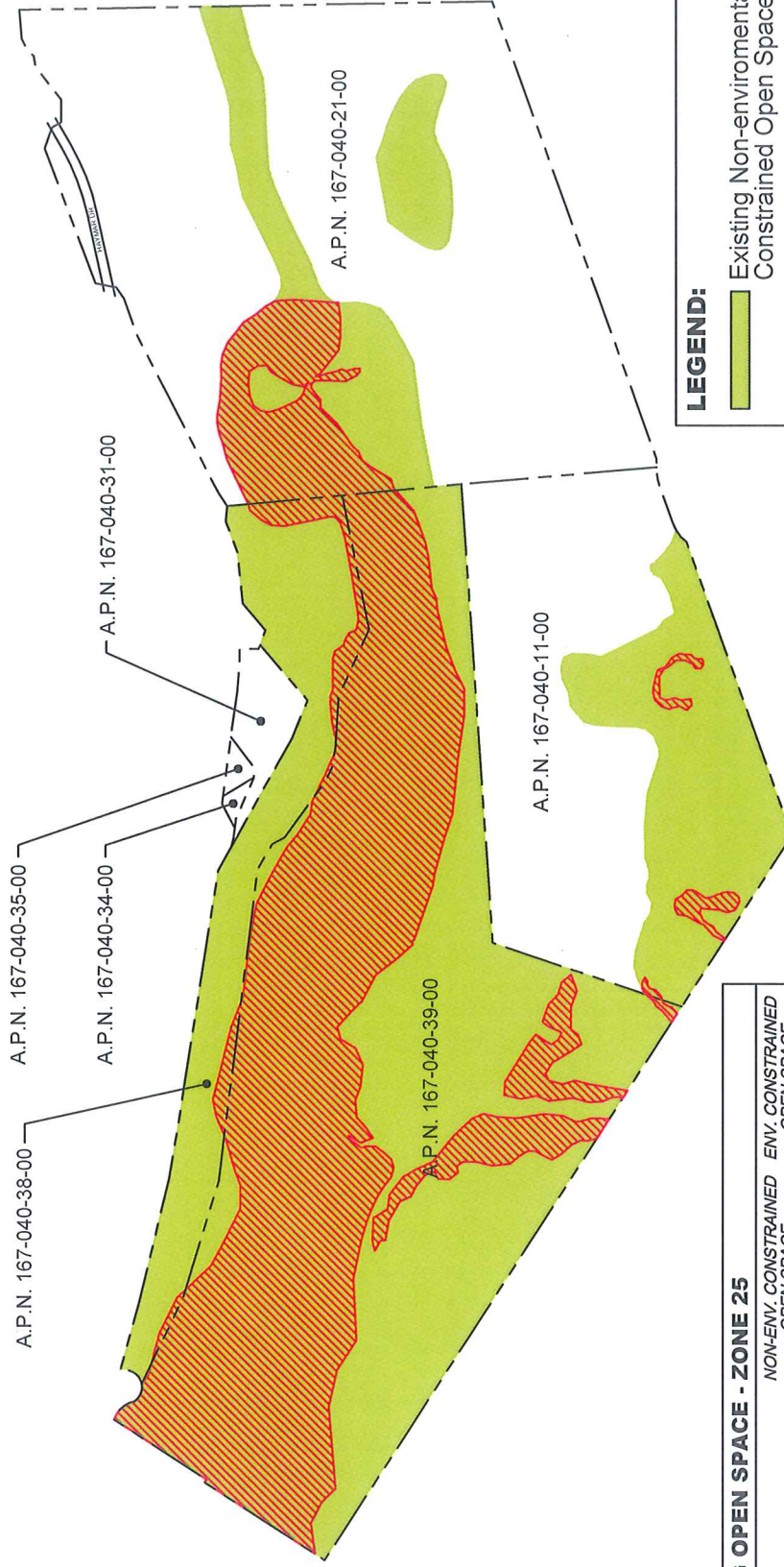
6.5.4 **Mitigation**

SPECIAL CONDITIONS:

A management program, including property owner endowment for funding as may be required by the Habitat Management Plan is required for applicable open spaces within Zone 25.

6.5.5 **Financing**

The Table 45 analysis demonstrates that Zone 25 is in compliance with the required performance standard for open space and therefore no special funding mechanism is required except as required by the HMP.



LEGEND:

- Existing Non-environmentally Constrained Open Space
- Existing Environmentally Constrained Open Space
- Parcel Boundary Line

Note:
Open Space areas are approximate.

Source:
City of Carlsbad GIS Dept. Land Use Map Information (February 2012)

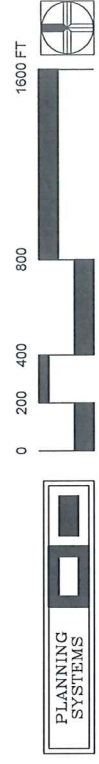
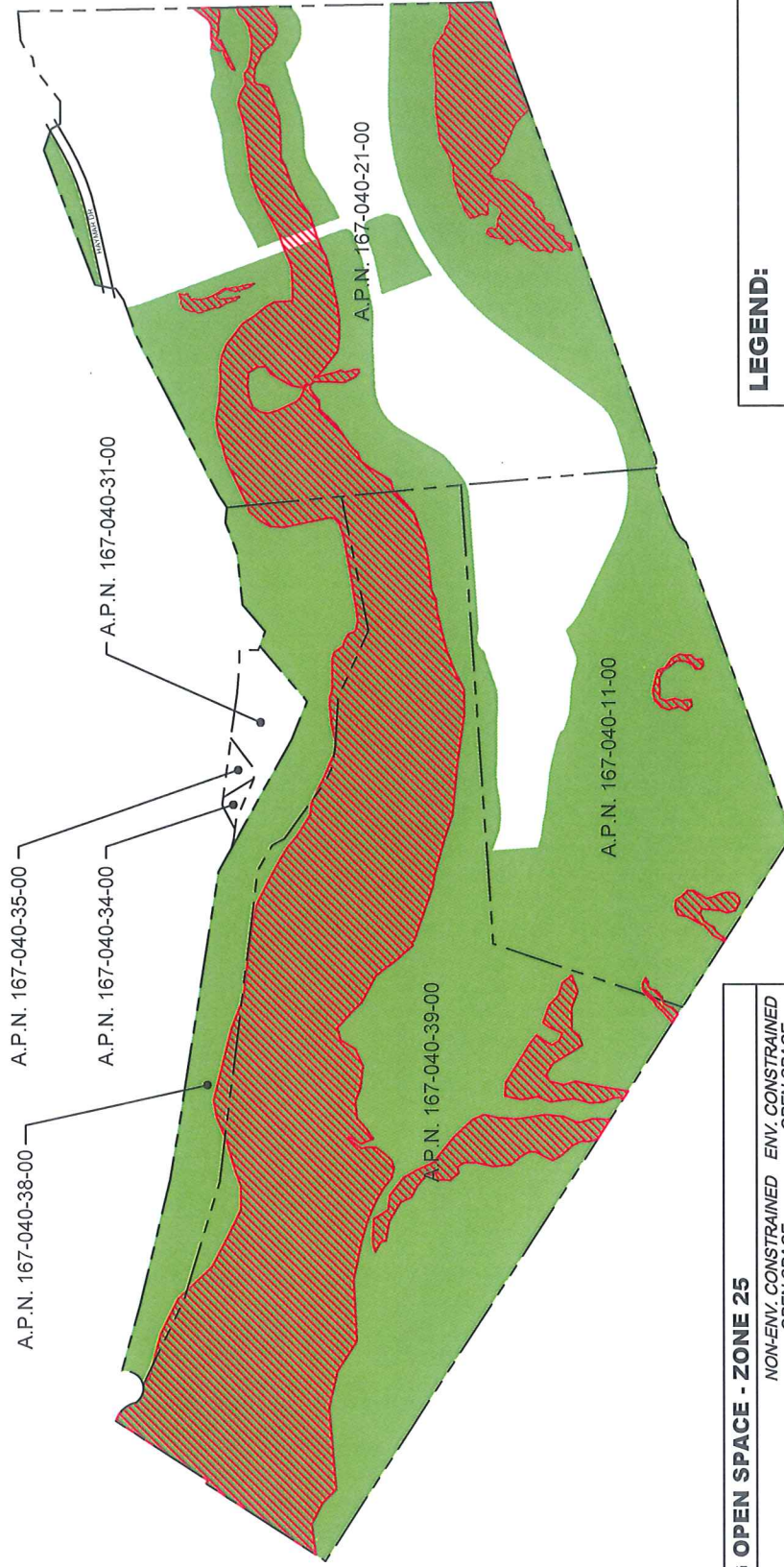


FIGURE 18

EXISTING OPEN SPACE - ZONE 25			
PARCEL NO.	OWNERSHIP	NON-ENV. CONSTRAINED OPEN SPACE AREA (acres)	ENV. CONSTRAINED OPEN SPACE AREA (acres)
167-040-11	Hanson Aggregates Pacific Southwest Inc.	20.4 ac.	0.9 ac.
167-040-21	Hanson Aggregates Pacific Southwest Inc.	10.2 ac.	9.1 ac.
167-040-31	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-34	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-35	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-38	State of California Dept. of Fish & Game	18.6 ac.	2.6 ac.
167-040-39	State of California Dept. of Fish & Game	47.1 ac.	65.5 ac.
TOTAL:		96.3 ac.	78.1 ac.

EXISTING OPEN SPACE MAP



LEGEND:

- Non-environmentally Constrained Open Space
- Environmentally Constrained Open Space
- Parcel Boundary Line

Note:
Open Space areas are approximate.

Source:
 - City of Carlsbad GIS Dept. Land Use Map information (February 2012)
 - Draft Quarry Creek Master Plan (March 2012)

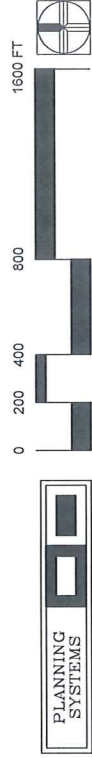


FIGURE 19

EXISTING OPEN SPACE - ZONE 25			
PARCEL NO.	OWNERSHIP	NON-ENV. CONSTRAINED OPEN SPACE AREA (acres)	ENV. CONSTRAINED OPEN SPACE AREA (acres)
167-040-11	Hanson Aggregates Pacific Southwest Inc.	39.1 ac.	0.9 ac.
167-040-21	Hanson Aggregates Pacific Southwest Inc.	35.3 ac.	20.8 ac.
167-040-31	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-34	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-35	Caron Shelley H. Trust 07-13-06	0.0 ac.	0.0 ac.
167-040-38	State of California Dept. of Fish & Game	18.6 ac.	2.6 ac.
167-040-39	State of California Dept. of Fish & Game	47.1 ac.	65.5 ac.
TOTAL:		140.1 ac.	89.8 ac.

PROPOSED OPEN SPACE MAP

6.6 SCHOOL FACILITIES

6.6.1 Performance Standard

School capacity to meet the projected enrollment within the zone as determined by the appropriate school district must be provided prior to projected occupancy.

6.6.2 Facility Planning and Adequacy Analysis

6.6.2.1 Inventory

Zone 25 is located entirely within the Carlsbad Unified School District (CUSD). There are currently eight elementary schools, three middle schools (Aviara Middle School, Calavera Hills Middle School, and Valley Middle School), one continuation high school, and one high school within the district. No schools presently exist within the zone; however, existing Hope Elementary School and the Calavera Hills Elementary and Middle Schools are within Zone 7 to the south. CUSD is presently developing the 56.6-acre parcel located within Zone 14 as a second high school for the district.

The City of Carlsbad General Plan identifies approximate, and in cases where CUSD has already purchased property, precise locations for future school sites in order to meet projected growth of the city. This process involves responses from the District confirming the exact site locations at time of development.

The locations of existing and future School facilities are shown on *Figure 20*.

6.6.2.2 Buildout Assumptions

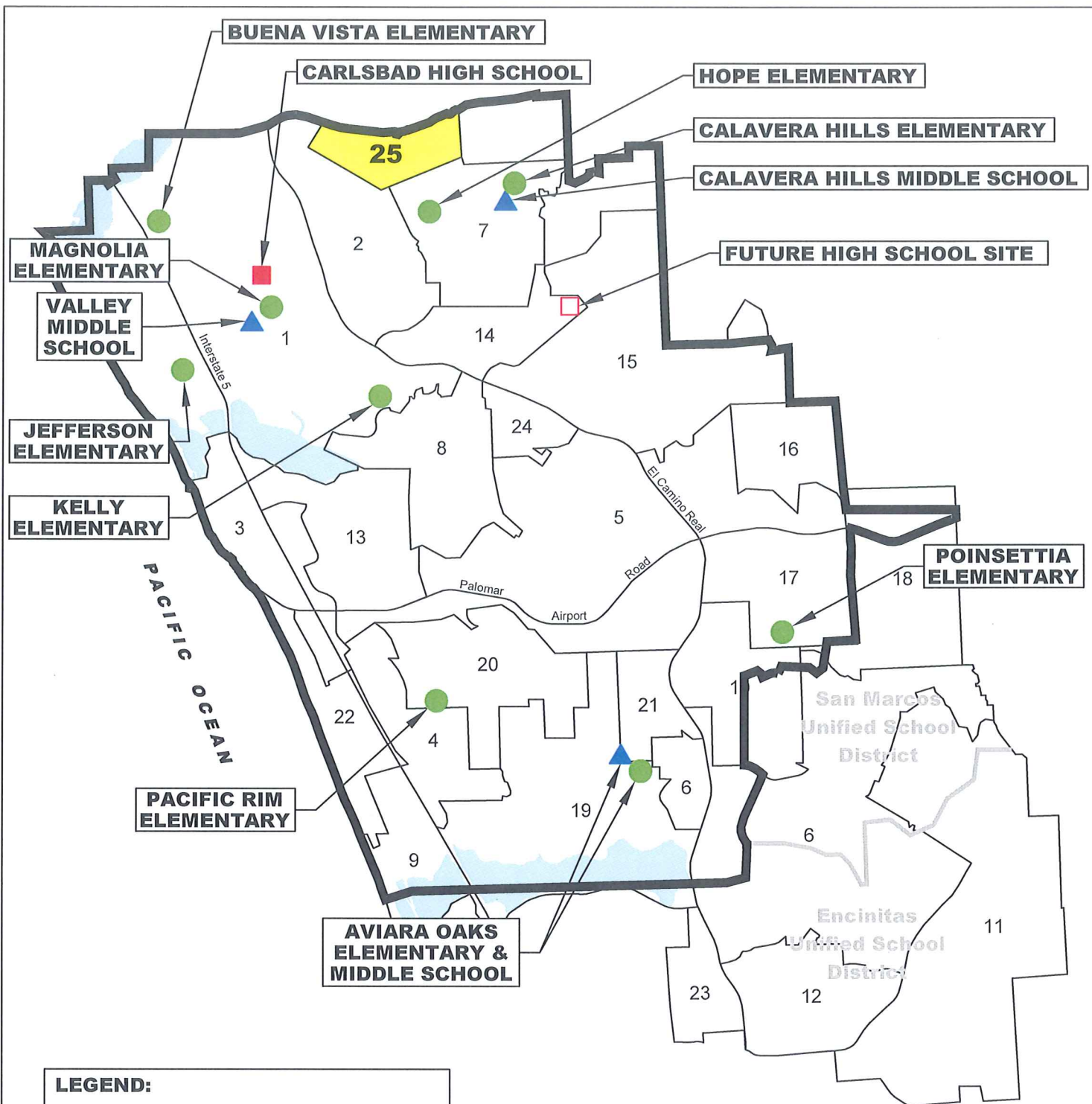
Projected Zone 25 existing and buildout population and the resulting student generation are projected as follows:

Table 31: Zone 25 Student Generation K-5

	Zone 25 Buildout du	Student Gen. Rate K-5	Students Generated Grade K-5
Residential Total	665	0.1614	107.3

Table 32: Zone 25 Student Generation Grades 6 to 8

	Zone 25 Buildout du	Student Gen. Rate Grade 6 to 8	Students Generated Grade 6 to 8
Residential Total	665	0.0815	54.2



SCHOOL LOCATIONS

LFMP - Zone 25

FIGURE 20

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Table 33: Zone 25 Student Generation 9 to 12

	Zone 25 Buildout du	Student Gen. Rate Grade 9 to 12	Students Generated Grade 9 to 12
Residential Total	665	0.0959	63.8

All of Zone 25 is within the Calavera Hills Elementary School (Grades K to 5) and Calavera Hills Middle School (Grades 6 to 8) attendance boundary areas.

All of Zone 25 is within the Carlsbad High School (Grades 9 to 12) boundary.

At buildout of Zone 25, the zone is expected to generate 107.3 elementary students, 54.2 middle school students, and 63.8 high school students at any one time.

6.6.2.3 Phasing

The most recent adopted CUSD School Location Plan projects buildout demand based on a compilation of the various LFMP projected student expectations. According to the CUSD Facilities Master Plan (2007), sufficient student capacity exists through 2014.

6.6.3 Adequacy Findings

The most recent adopted CUSD School Location Plan projects buildout demand based on a compilation of the various LFMP projected student expectations.

For the purposes of long range planning, CUSD indicates that they consider all existing facilities at capacity. The smallest increment of demand area utilized by CUSD for their planning analysis is the city quadrant.

Based on available information, as indicated above, it is estimated that CUSD will maintain sufficient capacity through the years 2014-2018. School enrollment projections and facility master plans will be periodically updated by the school district, allowing future capacity analysis to be performed to verify that projected enrollment can be accommodated.

6.6.4 Mitigation

SPECIAL CONDITIONS

- a. Confirm with Carlsbad Unified School District compliance with the adopted school performance standard as a prerequisite of any development within the zone. All development within Zone 25 will be conditioned in accordance with the requirements of the State of California and the CUSD.
- b. The Quarry Creek development on the Hanson Aggregates property has been annexed into CUSD CFD #3 which provides the funding mechanism for payment of school mitigation costs and thus conformance with the adopted school performance standard and requirements of the State of California and CUSD. As other properties develop, it will necessitate their annexation into CFD #3 also.

6.6.5 Financing

No financing is required for schools since the property is annexed into the CUSD Community Facilities District (CFD) No. 3, or alternatively, the payment of school impact fees in conjunction with the issuance of building permits for development.

6.7 SEWER COLLECTION

6.7.1 Performance Standard

Trunk line capacity must meet sewer demand, as determined by the appropriate sewer districts, and must be provided concurrent with development.

6.7.2 Facility Planning and Adequacy Analysis

6.7.2.1 Inventory - Zone 25 Existing Interceptor Trunk Lines

Zone 25 is located within the City of Carlsbad sewer service area. In November, 2003, the City adopted the Carlsbad Sewer Master Plan Update which identified trunk facilities necessary for buildout of the city. Although Zone 25 is presently undeveloped, development within the zone will ultimately be served by the existing sewer trunk line which travels westerly along the projects north boundary [Vista/Carlsbad Interceptor VC1]. This line is fully operational and available for the development of Zone 25. All of Zone 25 buildout development will sewer down this line.

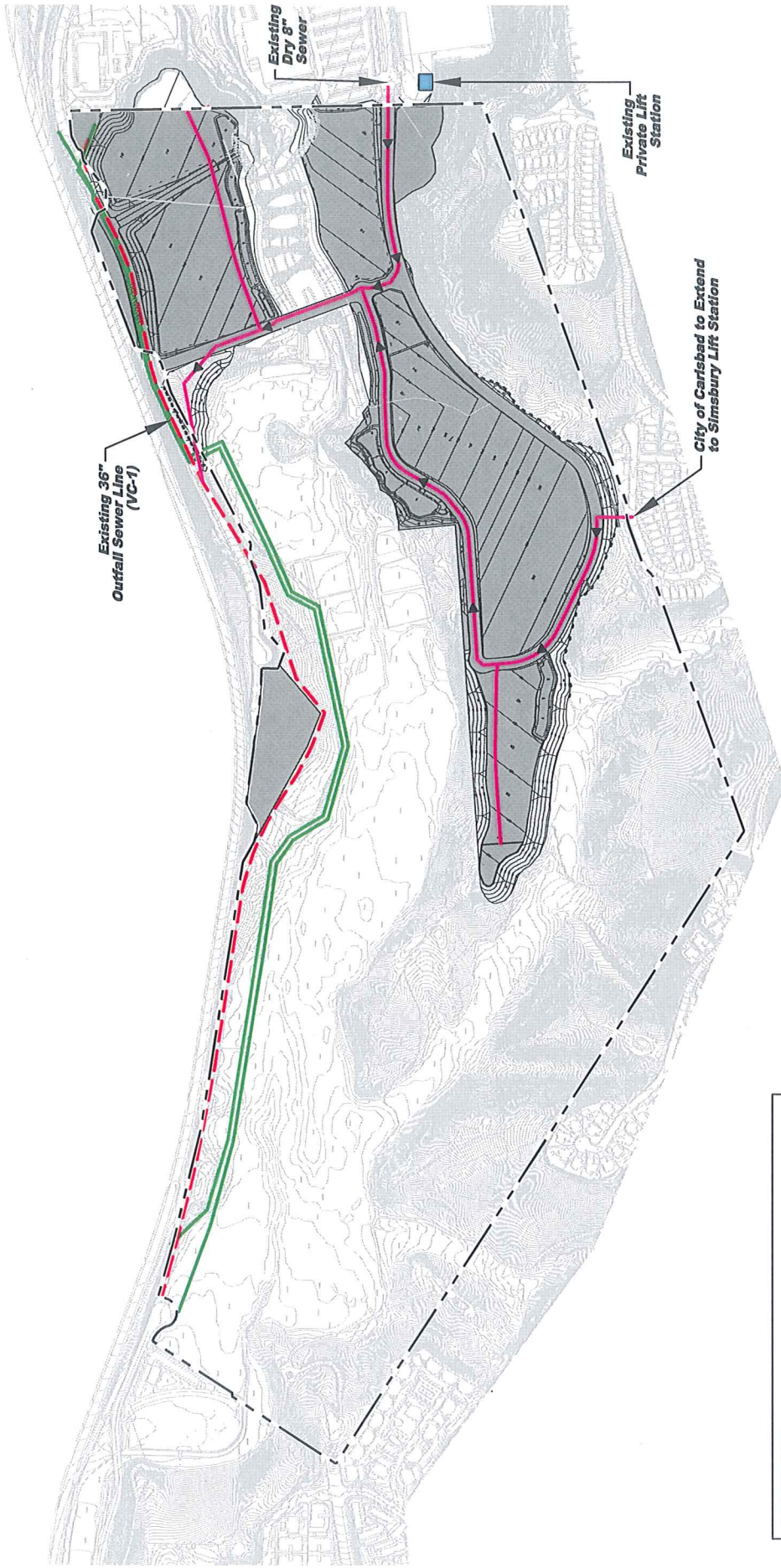
6.7.2.2 Inventory – Vista-Carlsbad Interceptor Line

The Vista-Carlsbad Interceptor travels west down the Buena Vista valley towards the coast then south to the Encina Wastewater Facility. The City of Carlsbad has capacity rights to this interceptor line. These capacity rights vary from 0%/0 MGD up to 50%/33.6 MGD. The percentage of Carlsbad capacity rights increases in the downstream reaches (along the Zone 25 area), and on to the EWPCF. In the section downstream from Zone 25, the interceptor is 36" in diameter.

A capacity analysis included in the 2003 City of Carlsbad Sewer Master Plan indicates three relatively flat pipeline portions of Reaches VC13, VC14 and VC15 of this interceptor line. As a result, during peak period flows, the pipeline is flowing full. The City of Carlsbad CIP includes funds to replace these sections. The replacement pipelines are sized based on ultimate flows from both the Carlsbad and the City of Vista sewer systems.

6.7.2.3 Technical Assumptions

The current Sewer Master Plan for the city of Carlsbad establishes unit flow generation factors as a basis for projecting the average sewer flows. The average unit flow from the City of Carlsbad was projected using 220 gallons per day per equivalent dwelling unit (EDU).



LEGEND:

- Zone 25 LFMP Boundary
- - - Existing Outfall Sewer Line
- Existing Sewer Main Line
- Proposed Sewer Line
- Development

Source:

- City of Vista - 'Buena Vista Creek Outfall Sewer Phase II' As-Built. (February 1987)
- Draft Quarry Creek Master Plan - Master Sewer Plan (March 2012)

PLANNING SYSTEMS

0 200 400 800 1600 FT

6.7.2.4 Existing Demand

Zone 25 presently contains only one residential unit which utilizes a septic tank, and therefore no sewer demand results from the existing situation.

6.7.2.5 Buildout Sewer Demand

Sewer improvements are provided on a project by project basis concurrent with development. Currently, the City of Carlsbad's sewer service area sewer pipelines are in compliance with the Growth Management Sewer Collection Services performance standard. The projected buildout sewer flows for Zone 25 are determined by multiplying the buildout projections as established in this plan by the average unit flow factors obtained from the Sewer Master Plan. The anticipated sewer service facilities to be constructed in conjunction with Zone 25 are shown on *Figure 21*.

At buildout, the projected average sewer flow for Zone 25 is as shown on *Table 34*.

Table 34: Buildout Sewer Flow Projections

Land Use	Proposed Buildout	Average Unit Flow	Buildout Sewer Flow
Residential	665 DU	220 GPD	146,300
Community Facilities/Recreation	15 EDU	220 GPD	3,300
TOTAL	680 EDU		149,600

6.7.2.6 Phasing

The sewer performance standard requires that trunk line capacity to meet demand must be provided concurrent with development. To determine this demand, the yearly average flow from Zone 25 is determined as follows:

Table 35: Zone 25 Sewage Flow Phasing

Year	EDU Generation Projection	Average Flow (GPD)
Existing	1*	0
2013	75	16,500
2014	210	46,200
2015	206	45,320
2016	152	33,440
2017	36	4,620
Buildout	680	149,600

The existing unit in Zone 25 is not connected to the sewer and is on a septic tank.

Onsite sewage improvements required to serve the proposed development in Zone 25 are shown graphically on Exhibit 21.

Improvements Required for Zone 25 Development. The following sewer improvements are required as Zone 25 development occurs:

- Sewage collection from the eastern section of Zone 25 (Quarry Creek) will occur through a variety of sewer pipes ultimately connecting to the Vista/ Carlsbad Interceptor northwest of the project.
- The project will provide a gravity sewer line stub to allow the city to eliminate the Simsbury Pump Station.
- The project will provide a sewer stub to the projects eastern boundary at the terminus of the existing Marron Road so the existing private sewer lift station can be eliminated with a gravity sewer system.

6.7.3 Adequacy Findings

The existing Vista/Carlsbad Interceptor has capacity for the Quarry Creek project in addition to the Simsbury Pump Station and the Quarry Creek Shopping Center become a gravity system.

6.7.4 Mitigation

SPECIAL CONDITIONS:

- a. All development within Zone 25 will be required to pay the appropriate Sewer Connection Fees prior to issuance of any building permits for such development. Funds expended by developers on installation of regional sewer facilities identified in the Sewer Master Plan shall be reimbursed to the developer. Such reimbursement may be through the offsetting of fees.
- b. Development of the Quarry Creek project on the Hanson Aggregates property shall provide a gravity sewer connection to the southern boundary of Zone 25 at a location acceptable to the City Engineer in order that the Simsbury Sewer Lift Station can be abandoned.
- c. Development of the Quarry Creek project on the Hanson Aggregates property shall provide a gravity sewer stub to the eastern boundary of Zone 25 at the terminus of Marron Road so that in the future the Quarry Creek Shopping Center's sewer lift station can be connected and the private sewer lift station can be abandoned.

6.7.5 Financing

No financing is required other than developer-funding of all onsite sewer collection lines.

6.8 WATER DISTRIBUTION

6.8.1 Performance Standard

Line capacity to meet demand, as determined by the appropriate water district, must be provided concurrent with development. A minimum 10-day average storage capacity must be provided prior to development.

6.8.2 Facility Planning and Adequacy Analysis

Water service in the City of Carlsbad is provided by three separate agencies: Carlsbad Municipal Water District ("CMWD"), Vallecitos Water District ("VWD") and the Olivenhain Municipal Water District ("OMWD"). Zone 25 is located entirely within the CMWD service area.

CMWD has adopted the 2010 Urban Water Management Plan, which is the City's tool to evaluate the water system within the District and to formulate long-range plans that will provide for future improvements.

6.8.2.1 Inventory – Existing Facilities

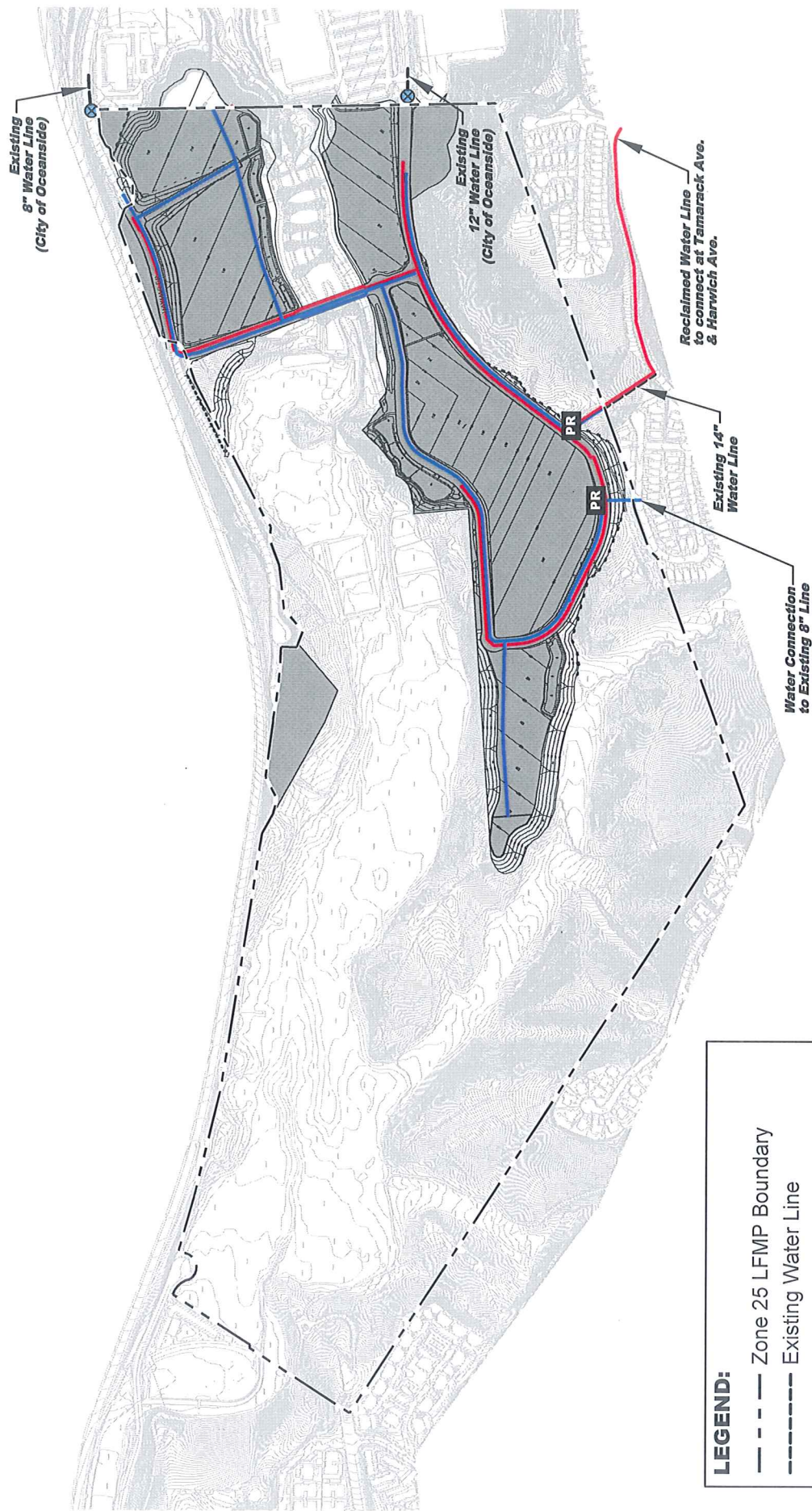
There are no existing water transmission facilities within Zone 25.

6.8.2.2 Proposed Buildout Facilities

The CMWD Master Plan identifies the on-site facilities necessary to service ultimate Zone 25 development. These facilities are shown on Exhibit BB.

6.8.2.3 Buildout Assumptions

Buildout projections and technical assumptions for Zone 25 indicate the assumptions for potable water demand as indicated on *Table 36*. The buildout water distribution improvements for the Zone 25 area are shown graphically on *Figure 22*.



LEGEND:

- - - Zone 25 LFMP Boundary
- - - Existing Water Line
- - - Proposed Water Line
- - - Proposed Reclaimed Water Line
- - - Development
- ⊗ Normally Closed Vault
- PR Pressure Reducing Vault

Source:
 - Draft Quarry Creek Master Plan -
 Master Water Plan (March 2012)

PLANNING SYSTEMS

0 200 400 800 1600 FT

ZONE 25 WATER DISTRIBUTION FACILITIES

LFMP - Zone 25

FIGURE 22

Table 36: Potable Water Demand

Land Use	Demand Factor	Units or EDU's	Average Demand GPD
Residential – High	250 GPD/DU	362	90,500
Residential – Medium High	250 GPD/DU	294	73,500
Residential – Low Medium	550 GPD/DU	9	4,950
Community Facilities	3,000 GPD/Ac.	12	6,000
Recreation	3,000 GPD/Ac.	6	3,000
TOTAL			177,950

6.8.2.4 Phasing

The water systems planning criteria used to design the water distribution program within Zone 25 are in accordance with the City of Carlsbad Water Design Procedures and Guidelines, revised Nov. 30, 2009. For planning purposes, yearly demand projections are shown on *Table 37* for the potable water distribution system.

Table 37: Zone 25 Potable Water Demand (GPD)

Year	Land Use	PA	EDU	Gallons per EDU	EDU per Year	GPD	Cumulative GPD
Exist	RLM	R-6	1	550		550	
				Exist Total	550	550	550
2013	RH	R-1	50	250		12,500	
	RMH	R-3	25	250		6,250	
	Rec.	P-3	6	500		3,000	
				2013 Total	81	21,750	22,300
2014	RH	R-1	79	250		19,750	
	RH	R-2	56	250		14,000	
	RMH	R-3	25	250		6,250	
	RMH	R-4	25	250		6,250	
	RMH	R-5	25	250		6,250	
				2014 Total	210	52,500	74,800
2015	RH	R-2	100	250		25,000	
	RMH	R04	75	250		18,750	
	RMH	R-5	31	250		7,750	
				2015 Total	206	51,500	126,300
2016	RH	R-2	77	250		19,250	
	RMH	R-4	75	250		18,750	
				2016 Total	152	38,000	164,300
2017	RMH	R-4	13	250		3,250	
	RLM	R-6	8	550		4,400	
	CF	P-2	12	500		6,000	
				2017 Total	33	13,650	177,950
Total			683		683		177,950

In order to determine adequacy of compliance with the adopted performance standard, the approach taken in this Local Facilities Management Plan is based on ensuring that needed facilities are in place prior to or concurrent with development. Thresholds for the major water facilities within Zone 25 can be established, thereby determining the appropriate mitigation measures.

Improvements Required for Zone 25 Development. The following improvements are required as Zone 25 development occurs:

- Connect to the Carlsbad Municipal Water District's 14-inch water line at the southern property line north of Tamarack Avenue and 8" line in Simsbury Court.
- Extend a reclaimed line to the existing reclaimed pipe at Tamarack Ave. and Harwich Dr.

6.8.3 Adequacy Findings

6.8.3.1 Onsite Line Capacity

Since development is required to install water distribution facilities as a condition of future development consistent with the above analyses, conformance with the adopted performance standard will be maintained to the ultimate buildout of the zone.

6.8.3.2 Average 10-Day Storage Capacity

Per the revised Carlsbad Municipal Water District Master Plan for Public Water System, the storage capacity within the system is currently 15.1 days. The estimated current storage capacity is 241.5 million gallons with average daily demand estimated to be 16.0 million gallons. This provides for a projected storage of 15.1 days capacity; thus, the CMWD system design currently indicates that a minimum 10-day storage supply is available.

Table 38: Water Storage Capacity

	Current	Projected-Ultimate
Storage Capacity	241.5 MG	254.5 MGD
Average Daily Demand	16.0 MGD	24.5 MGD
Days of Storage	15.1 Days	10.4 Days

As demonstrated on *Table 38*, the projected ultimate storage capacity is estimated to be 254.5 million gallons with an average ultimate daily demand of 24.5 million gallons. This will provide for an ultimate projected storage of 10.4 days capacity which assures that the minimum 10-day storage supply will be available at buildout.

6.8.4 Mitigation

SPECIAL CONDITIONS:

- a. Water facilities will be provided by the developer(s) of projects within Zone 25 concurrent with Zone 25 development to the satisfaction of CMWD.
- b. All future development in Zone 25 shall pay a major facilities fee based on water meter size to CMWD and any capacity charge levied by the San Diego County Water Authority for domestic water meters.

6.8.5 Financing

No financing is required other than developer-funding of all onsite water distribution lines.

7 FACILITY FINANCING

As required by the City of Carlsbad Growth Management Ordinance (Carlsbad Municipal Code Section 21.90.110), this chapter contains a financing plan for the construction of facilities and improvements identified by the Local Facilities Management Plan (LFMP) as required to serve new development in Zone 25. The financing methods consist of:

- Source of funds for construction of the facility
- Method of guaranteeing the availability of funds
- Source of public funds from which reimbursement is made to the developer of the facility, if applicable

7.1 FINANCING MECHANISM AND GUARANTEE

The following sources of funds and financing guarantees are used in this plan. The application of these funds and completion of specified actions identified as "financing guarantee" shall constitute the guarantee that facilities will be provided, as required by Chapter 21.90.080 of the Carlsbad Municipal Code. Mechanisms used to finance the construction of major improvements are described below, along with the "financing guarantee" required by the Growth Management Program.

7.1.1 Developer Funding

Under this method, the developer will fund and construct the required facility prior to or concurrent with project development. Facilities to be funded in this way are those which normally would be imposed as conditions of approval of a tentative map under the City's development review process.

Guarantee. If an improvement is to be funded by the developer, either the improvement must be constructed, or an improvement agreement must be provided by the developer, prior to the recordation of a final map for the development requiring the improvement. The improvement agreement must be in accordance with Section 66462 of the Subdivision Map Act and Section 20.16.060 of the Carlsbad Municipal Code. The improvement agreement must be secured with one of the following forms of security as described in Section 21.16.070 of the Carlsbad Municipal Code: surety bond, cash, irrevocable instrument or letter of credit, as determined acceptable to the Finance Director and City Attorney.

7.1.2 City of Carlsbad Community Facilities District No. 1

A Mello-Roos community facilities district (CFD) has been formed by the City of Carlsbad and approved on May 7, 1991, by an affirmative vote of the landowners to fund construction of certain citywide facilities, including some facilities which are required and projected by this plan.

Guarantee. Annexation to the City of Carlsbad CFD No. 1 and payment of special taxes levied by the district constitute the financing guarantee for facilities funded by the district.

3. Development and Impact Fees

In addition to CFD No. 1, the City of Carlsbad has established a number of fee programs to fund their capital improvement program, including some of the facilities required to serve anticipated development in Zone 25. Those fees include, but are not limited to the Park In-Lieu Fee, the Local Drainage Fee, Public Facility Fees, Sewer Benefit Area Fee, Sewer Capacity Fee, Traffic Impact Fee, and Water Service Connection Fee. In some cases, payment of one or more of these fees satisfies the financing guarantee of a needed improvement. In other cases, fees collected by the City provide the source of reimbursement to the developer constructing the improvement.

Guarantee. If a facility, which is planned to be funded from an existing fee program, has already been constructed, or if it will be constructed in a timely manner, as determined by the City Engineer, to serve a given development in Zone 25, the financing guarantee consists of payment of the applicable fee, generally at the time of issuance of building permits. If a facility to be funded from a fee program will not be constructed in a timely manner, another financing mechanism must be identified on an interim basis (for example, developer funding), with reimbursement from the applicable fee program.

7.1.3 Reimbursement from the City of Carlsbad Development Fee Fund

7.1.3.1 City-Developer Reimbursement Agreement

In the event that a developer constructs a facility which is included in an existing public financing program, such as a CFD, BTDA, PLDA, Sewer or development impact fee program, and if it is necessary for the developer to advance funds for construction, then the City and the developer shall enter into a reimbursement agreement, which identifies costs to be reimbursed, source or sources of reimbursement, including fee credits, and the process and timing of reimbursement.

7.1.3.2 Private Reimbursement Agreement

If a facility is not included in an existing public financing program and is needed to serve multiple developments, including those outside of Zone 25, the City will impose as a condition of approval on all such developments the requirement to construct the facility. The City will cooperate in executing a reimbursement agreement by the affected developers, so that the developer of the improvement will obtain reimbursement of costs which are allocable to other developers. The reimbursement agreement may be recorded against the titles of participating properties, and a copy of the agreement shall be provided to the City of Carlsbad Community Economic and Development (Engineering Land Use Division) Department.

7.2 COORDINATION WITH FINANCING PLANS OF OTHER ZONES

Per the requirements of the Growth Management Ordinance, financing plans for other Local Facilities Management Zones which require one or more of the improvements described here shall be coordinated with the financing plan for Zone 25. However, coordination shall not necessarily mean identical financing mechanisms.

7.3 TIMING OF DEVELOPMENT

This financing plan is based on the assumption that development in LFMP Zone 25 will precede other zones which require some of the same improvements. In the event that development in those zones precedes Zone 25 and if this financing plan does not describe an optional financing mechanism for such a scenario, then this plan will be amended as necessary.

7.4 FINANCING METHODS FOR LFMP IMPROVEMENTS

Included below is a summary table (*Table 39*) of the anticipated financing methods for all major improvements described in this Zone 25 LFMP and detailed tables for improvements identified in the special conditions of this plan.

Table 39: Zone 25 Facility Financing Matrix

Improvement or Facility	Source of Funds
City Administrative Facilities	
Public Works Center	Sewer, CFD No. 1, Water
New City Hall	CFD No. 1
Library Facilities	
Cole Library Expansion	CFD No. 1 PFF
Cole Library Remodel	PFF
Wastewater Treatment Facility	
Encina Building Improvements	Sewer Fees
Encina Phase V Expansion	Sewer Fees
Park Facilities	
Zone 14 Park - Robertson	PIL- Park District 2
Veteran's Memorial Park (City)	CFD No. 1
Drainage Facilities	
Facility A1-Sedementaiton Basin	Developer Fund subject to Drainage Fee Credits
Circulation Facilities	Zone 25 Developer
Fire Facilities	None Required
Open Space Facilities	None Required
School Facilities	State Funding/CFD #3/School Fees
Sewer Facilities	
On-site Sewer Collection Lines	Zone 25 Developer
Water Facilities	
Onsite Water Distribution Lines	Zone 25 Developer

7.5 CITY ADMINISTRATIVE FACILITIES – FINANCING

7.5.1 Required Facilities

City Administrative Facilities required by this Plan are the New City Hall and the Public Works Center. These facilities are required for all zones in the city, including Zone 25.

7.5.2 Source of Funds

The City's Capital Improvement Program includes the above facilities. The source of funds identified as the Public Facilities Fee will be collected at the time of issuance of building permits. Portions of the New City Hall and Public Works Center are also proposed to be funded through the Carlsbad CFD No. 1.

7.5.3 Financing Guarantee

Participation in Carlsbad CFD No. 1 satisfies the financing guarantee for the facilities included in the CFD. Payment of Public Facilities Fees at the time of issuance of building permits for development shall satisfy the financing obligation of private development for the remainder of City Administrative Facilities, as long as the City monitoring program concludes that the Growth Management Program performance standards continue to be in compliance.

7.6 LIBRARY FACILITIES - FINANCING

7.6.1 Required Facilities

Library Facilities required by this Plan are the expansion and remodel of the Cole Library. These facilities are required for all zones in the city, including Zone 25.

7.6.2 Source of Funds

The City's Capital Improvement Program includes the above facilities. The source of funds identified as the Public Facilities Fee will be collected at the time of issuance of building permits. The expansion of the Cole Library is also proposed to be funded through the Carlsbad CFD No. 1 and PFF Fees.

7.6.3 Financing Guarantee

Participation in Carlsbad CFD No. 1 satisfies the financing guarantee for the facilities included in the CFD. Payment of Public Facilities Fees at the time of issuance of building permits for development shall satisfy the financing obligation of private development for the remainder of City Administrative Facilities, as long as the City monitoring program concludes that the Growth Management Program performance standards continue to be in compliance.

7.7 WASTEWATER TREATMENT FACILITIES – FINANCING

7.7.1 Required Facilities

The required facilities are the Encina Building Improvements and the Encina Phase V Expansion with interim capacities.

7.7.2 Source of Funds

The source of funds for these facilities is the sewer connection fee collected by City of Carlsbad.

7.7.3 Financing Guarantee

Payment of sewer connection fees shall satisfy the financing obligation of private development for Wastewater Treatment Capacity.

7.8 PARK FACILITIES – FINANCING

7.8.1 Required Facilities

Park facilities required for Park District 2 include the improvement to Hidden Canyon Park and the Zone 14 Community Park. Also required, if Zone 25 is developed to its ultimate maximum projected intensity, would be the improvements to Veteran's Memorial Park or some other additional park facility.

7.8.2 Source of Funds

The land for Hidden Canyon Park, Veteran's Memorial Park, and the Zone 14 park has been acquired. Park improvements will be funded through Park-In-Lieu fees. All park improvements are incorporated in the City's Capital Improvement Program (CIP). No additional sources of funds will be required.

Table 40: Park Financing

Facility	Funding Program	Amount Budgeted	Acreage
Veteran's Memorial Park	CFD No. 1	\$23,239,800	25.0
NE Quadrant Park Site Development	PIL-NE	\$1,650,000	13.4

7.8.3 Financing Guarantee

Payment of CFD No. 1 special taxes and Public Facilities Fees shall satisfy the financing guarantee for construction of the necessary future parks. Payment of these fees will satisfy the Zone 25 obligation for parks facilities as long as the City monitoring program concludes that the Growth Management Program performance standards continue to be in compliance.

7.9 DRAINAGE FACILITIES – FINANCING

7.9.1 Required Facilities

Onsite storm drain facilities are required of Zone 25. The developer of any particular planning area requiring a storm drain facility shall construct the improvement.

7.9.2 Source of Funds

Facilities will be funded by the Zone 25 developer. Master Drainage Plan facilities will be reimbursed from and/or credited against payment of PLDA Fees to the extent allowed pursuant to the existing and proposed updated to the PLDA Fee Program.

7.9.3 Financing Guarantee

The improvements described above shall be constructed, or an improvement agreement shall be provided by the developer, prior to the recordation of a final subdivision map for the planning area or development requiring such improvement. The improvement agreement shall be in accordance with Section 66462 of the Subdivision Map Act and Section 20.16.060 of the Carlsbad Municipal Code. The improvement agreement shall be secured with one of the following forms of security as described in Section 21.16.070 of the Carlsbad Municipal Code: surety bond, cash, irrevocable instrument or letter of credit, as determined acceptable to the Finance Director and City Attorney.

No final subdivision in planning areas requiring these improvements may be recorded until a financial guarantee for the appropriate drainage improvements has been provided to the City, and has been found acceptable to the City Finance Director and City Attorney.

7.10 CIRCULATION FACILITIES – FINANCING

7.10.1 Required Facilities

All roadway improvements within Zone 25 shall be the responsibility of the Zone 25 developer(s).

7.10.2 Source of Funds

On-site roadway improvements within Zone 25 shall be privately funded by the developer(s) of Zone 25.

7.10.3 Financing Guarantee

The improvements described above shall be constructed, or an improvement agreement shall be provided by the developer, prior to the recordation of a final subdivision map for the planning area or development requiring such improvement. The improvement agreement shall be in accordance with Section 66462 of the Subdivision Map Act and Section 20.16.060 of the Carlsbad Municipal Code. The improvement agreement shall be secured with one of the following forms of security as described in Section 21.16.070 of the Carlsbad Municipal Code: surety bond, cash, irrevocable instrument or letter of credit, as determined acceptable to the Finance Director and City Attorney.

No final subdivision in planning areas requiring these improvements may be recorded until a financial guarantee for the appropriate drainage improvements has been provided to the City, and has been found acceptable to the City Finance Director and City Attorney.

7.11. FIRE FACILITIES – FINANCING

7.11.1 Required Facilities

None are required.

7.11.2 Source of Funds

None are required.

7.11.3 Financing Guarantee

None are required.

7.12. OPEN SPACE FACILITIES – FINANCING

7.12.1 Required Facilities

None are required.

7.12.2 Source of Funds

Endowments per HMP requirements.

7.12.3 Financing Guarantee

Endowments per HMP requirements.

7.13. SCHOOL FACILITIES – FINANCING

7.13.1 Required Facilities

As required by Carlsbad Unified School District.

7.13.2 Source of Funds

The Zone 25 developer shall pay the applicable school fees as required by Carlsbad Unified School District.

7.13.3 Financing Guarantee

The developer will provide funding, either directly or through participation in the CUSD Mello-Roos Community Facilities District (CFD No. 3).

7.14 SEWER FACILITIES – FINANCING

7.14.1 Required Facilities

Onsite sanitary sewer collection lines are required. The developer of a planning area requiring a particular sewer collection facility shall construct the improvement.

7.14.2 Source of Funds

Developer funding for all onsite lines.

7.14.3 Financing Guarantee

The improvements described above shall be constructed, or an improvement agreement shall be provided by the developer, prior to the recordation of a final subdivision map for the planning area or development requiring such improvement. The improvement agreement shall be in accordance with Section 66462 of the Subdivision Map Act and Section 20.16.060 of the Carlsbad Municipal Code. The improvement agreement shall be secured with one of the following forms of security as described in Section 21.16.070 of the Carlsbad Municipal Code: surety bond, cash, irrevocable instrument or letter of credit, as determined acceptable to the Finance Director and City Attorney.

No final subdivision in planning areas requiring these improvements may be recorded until a financial guarantee for the appropriate drainage improvements has been provided to the City, and has been found acceptable to the City Finance Director and City Attorney.

7.15 WATER FACILITIES – FINANCING

7.15.1 Required Facilities

Onsite water distribution lines are required. The developer of a planning area requiring a particular water distribution facility shall construct the improvement.

7.15.2 Source of Funds

Developer funding for all onsite lines.

7.15.3 Financing Guarantee

The improvements described above shall be constructed, or an improvement agreement shall be provided by the developer, prior to the recordation of a final subdivision map for the planning area or development requiring such improvement. The improvement agreement shall be in accordance with Section 66462 of the Subdivision Map Act and Section 20.16.060 of the Carlsbad Municipal Code. The improvement agreement shall be secured with one of the following forms of security as described in Section 21.16.070 of the Carlsbad Municipal Code: surety bond, cash, irrevocable instrument or letter of credit, as determined acceptable to the Finance Director and City Attorney.

No final subdivision in planning areas requiring these improvements may be recorded until a financial guarantee for the appropriate drainage improvements has been provided to the City, and has been found acceptable to the City Finance Director and City Attorney.